

Table 2.2 Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2017
 Million Short Tons

Rank (by demonstrated reserve base)	State	Underground			Surface			Total			Percent of Total		
		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	222	35,871	70,856	556	38,572	47,725	778	74,443	118,580	4.8%	29.4%	25.0%
2	Illinois	1,212	27,641	87,018	25	10,028	16,477	1,236	37,669	103,495	7.7%	14.9%	21.8%
3	Wyoming	6	22,911	42,429	5,867	12,664	15,296	5,873	35,576	57,724	36.5%	14.0%	12.2%
4	West Virginia	1,257	14,552	27,265	576	1,968	3,120	1,833	16,520	30,385	11.4%	6.5%	6.4%
5	Kentucky	565	6,745	15,700	483	7,202	12,472	1,048	13,947	28,172	6.5%	5.5%	5.9%
6	Pennsylvania	953	10,094	22,068	168	963	4,114	1,121	11,057	26,182	7.0%	4.4%	5.5%
7	Ohio	83	7,560	17,183	8	3,697	5,647	91	11,256	22,831	0.6%	4.4%	4.8%
8	Colorado	147	5,723	10,906	107	3,740	4,754	253	9,464	15,660	1.6%	3.7%	3.3%
9	Texas	-	-	-	536	9,064	11,775	536	9,064	11,775	3.3%	3.6%	2.5%
10	New Mexico	11	2,735	6,011	190	4,018	5,744	201	6,753	11,755	1.2%	2.7%	2.5%
11	Indiana	175	3,480	8,402	282	248	424	457	3,728	8,826	2.8%	1.5%	1.9%
12	North Dakota	-	-	-	980	6,575	8,619	980	6,575	8,619	6.1%	2.6%	1.8%
13	Alaska	-	2,335	5,423	50	480	664	50	2,815	6,087	0.3%	1.1%	1.3%
14	Missouri	-	689	1,479	s	3,154	4,505	-	3,843	5,984	-	1.5%	1.3%
15	Utah	174	2,292	4,675	1	208	263	176	2,500	4,938	1.1%	1.0%	1.0%
16	Alabama	218	371	736	25	2,215	3,109	243	2,586	3,845	1.5%	1.0%	0.8%
17	Iowa	-	807	1,732	-	320	457	-	1,127	2,189	-	0.4%	0.5%
18	Oklahoma	7	569	1,221	1	219	313	8	788	1,534	0.0%	0.3%	0.3%
19	Washington	-	674	1,332	-	6	8	-	681	1,340	-	0.3%	0.3%
20	Virginia	173	459	817	50	296	463	223	755	1,279	1.4%	0.3%	0.3%
21	Kansas	-	-	-	-	679	970	-	679	970	-	0.3%	0.2%
22	Tennessee	10	271	495	s	170	251	10	441	746	0.1%	0.2%	0.2%
23	Maryland	7	305	557	6	28	41	13	333	598	0.1%	0.1%	0.1%
24	Arkansas	-	126	271	-	101	144	-	227	415	-	0.1%	0.1%
25	Louisiana	-	-	-	86	275	371	86	275	371	0.5%	0.1%	0.1%
26	South Dakota	-	-	-	-	277	366	-	277	366	-	0.1%	0.1%
27	Michigan	-	55	123	-	3	5	-	58	128	-	0.0%	0.0%
28	Oregon	-	6	15	-	2	3	-	9	17	-	0.0%	0.0%
29	North Carolina	-	5	11	-	-	-	-	5	11	-	0.0%	0.0%
30	Georgia	-	1	2	-	1	2	-	2	4	-	0.0%	0.0%
31	Idaho	-	2	4	-	-	-	-	2	4	-	0.0%	0.0%
32	Arizona	-	-	-	197	-	-	197	-	--	1.2%	-	-
33	Mississippi	-	-	-	689	-	-	689	-	--	4.3%	-	-
U.S. Total		5,220	146,279	326,731	10,882	107,176	148,100	16,102	253,455	474,831			

w = Withheld to avoid disclosure of individual company data

Source: [EIA, Annual Coal Report, 2017](#)

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.

Table 2.2 Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2016
 Million Short Tons

Rank (by demonstrated reserve base)	State	Underground			Surface			Total			Percent of Total		
		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	228	35,877	70,867	595	38,602	47,761	823	74,479	118,629	4.9%	29.3%	24.9%
2	Illinois	1,499	27,670	87,108	30	10,030	16,481	1,529	37,700	103,589	9.0%	14.8%	21.8%
3	Wyoming	8	22,913	42,432	6,212	12,990	15,689	6,220	35,904	58,121	36.7%	14.1%	12.2%
4	West Virginia	1,276	14,629	27,410	285	1,984	3,145	1,561	16,613	30,555	9.2%	6.5%	6.4%
5	Kentucky	621	6,774	15,763	456	7,210	12,485	1,077	13,984	28,248	6.4%	5.5%	5.9%
6	Pennsylvania	1,047	10,141	22,156	178	966	4,121	1,225	11,107	26,277	7.2%	4.4%	5.5%
7	Ohio	217	7,566	17,197	14	3,699	5,651	231	11,265	22,847	1.4%	4.4%	4.8%
8	Colorado	179	5,738	10,933	112	3,740	4,754	291	9,478	15,687	1.7%	3.7%	3.3%
9	Texas	-	-	-	582	9,097	11,817	582	9,097	11,817	3.4%	3.6%	2.5%
10	New Mexico	17	2,739	6,022	194	4,027	5,754	211	6,766	11,776	1.2%	2.7%	2.5%
11	Indiana	218	3,492	8,430	346	261	446	564	3,752	8,876	3.3%	1.5%	1.9%
12	North Dakota	-	-	-	1,024	6,603	8,655	1,024	6,603	8,655	6.0%	2.6%	1.8%
13	Alaska	-	2,335	5,423	51	481	665	51	2,816	6,088	0.3%	1.1%	1.3%
14	Missouri	-	689	1,479	s	3,154	4,505	-	3,843	5,984	-	1.5%	1.3%
15	Utah	112	2,305	4,703	1	209	264	112	2,514	4,967	0.7%	1.0%	1.0%
16	Alabama	201	381	757	11	2,217	3,112	213	2,598	3,869	1.3%	1.0%	0.8%
17	Iowa	-	807	1,732	-	320	457	-	1,127	2,189	-	0.4%	0.5%
18	Oklahoma	7	569	1,222	s	219	313	7	788	1,535	0.0%	0.3%	0.3%
19	Washington	-	674	1,332	-	6	8	-	681	1,340	-	0.3%	0.3%
20	Virginia	165	470	836	50	299	467	215	769	1,303	1.3%	0.3%	0.3%
21	Kansas	-	-	-	-	679	970	-	679	970	-	0.3%	0.2%
22	Tennessee	-	271	495	-	170	251	1	442	747	0.0%	0.2%	0.2%
23	Maryland	8	306	558	5	29	42	13	335	601	0.1%	0.1%	0.1%
24	Arkansas	25	126	271	-	101	144	25	227	415	0.1%	0.1%	0.1%
25	Louisiana	-	-	-	88	277	374	88	277	374	0.5%	0.1%	0.1%
26	South Dakota	-	-	-	-	277	366	-	277	366	-	0.1%	0.1%
27	Michigan	-	55	123	-	3	5	-	58	128	-	0.0%	0.0%
28	Oregon	-	6	15	-	2	3	-	9	17	-	0.0%	0.0%
29	North Carolina	-	5	11	-	-	-	-	5	11	-	0.0%	0.0%
30	Georgia	-	1	2	-	1	2	-	2	4	-	0.0%	0.0%
31	Idaho	-	2	4	-	-	-	-	2	4	-	0.0%	0.0%
32	Mississippi	-	-	-	691	-	-	691	-	-	4.1%	-	-
33	Arizona	-	-	-	203	-	-	203	-	-	1.2%	-	-
U.S. Total		5,828	146,543	327,282	11,128	107,654	148,707	16,956	254,197	475,990			

w = Withheld to avoid disclosure of individual company data

Source: [EIA, Annual Coal Report, 2016](#)

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.

Table 2.2 Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2015
Million Short Tons

Rank (by demonstrated reserve base)	State	Underground			Surface			Total			Percent of Total		
		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	234	35,882	70,879	583	38,630	47,795	817	74,512	118,673	4.5%	29.2%	24.9%
2	Illinois	2,409	27,696	87,190	27	10,032	16,484	2,435	37,728	103,674	13.3%	14.8%	21.7%
3	Wyoming	34	22,915	42,435	6,647	13,297	16,059	6,681	36,212	58,494	36.5%	14.2%	12.3%
4	West Virginia	1,395	14,697	27,539	272	1,997	3,165	1,667	16,694	30,703	9.1%	6.5%	6.4%
5	Kentucky	689	6,804	15,828	147	7,217	12,497	837	14,021	28,326	4.6%	5.5%	5.9%
6	Pennsylvania	1,106	10,185	22,238	190	969	4,126	1,296	11,154	26,365	7.1%	4.4%	5.5%
7	Ohio	229	7,574	17,215	16	3,702	5,655	245	11,276	22,870	1.3%	4.4%	4.8%
8	Colorado	185	5,749	10,955	112	3,741	4,754	298	9,490	15,710	1.6%	3.7%	3.3%
9	Texas	-	-	-	633	9,134	11,866	633	9,134	11,866	3.5%	3.6%	2.5%
10	New Mexico	11	2,743	6,030	156	4,035	5,766	167	6,778	11,796	0.9%	2.7%	2.5%
11	Indiana	280	3,502	8,455	347	273	466	627	3,774	8,921	3.4%	1.5%	1.9%
12	North Dakota	-	-	-	974	6,630	8,690	974	6,630	8,690	5.3%	2.6%	1.8%
13	Alaska	-	2,335	5,423	51	482	666	51	2,817	6,089	0.3%	1.1%	1.3%
14	Missouri	-	689	1,479	-	3,154	4,506	-	3,843	5,985	-	1.5%	1.3%
15	Utah	127	2,318	4,729	1	210	265	128	2,528	4,994	0.7%	1.0%	1.0%
16	Alabama	204	389	772	24	2,219	3,115	228	2,608	3,887	1.2%	1.0%	0.8%
17	Iowa	-	807	1,732	-	320	457	-	1,127	2,189	-	0.4%	0.5%
18	Oklahoma	7	570	1,223	-	219	313	8	789	1,536	0.0%	0.3%	0.3%
19	Washington	-	674	1,332	-	6	8	-	681	1,340	-	0.3%	0.3%
20	Virginia	177	480	854	18	302	472	195	782	1,326	1.1%	0.3%	0.3%
21	Kansas	-	-	-	-	679	970	-	679	970	-	0.3%	0.2%
22	Tennessee	1	272	496	2	171	251	2	442	748	0.0%	0.2%	0.2%
23	Maryland	8	307	560	11	29	43	18	336	603	0.1%	0.1%	0.1%
24	Arkansas	25	126	271	-	101	144	25	227	415	0.1%	0.1%	0.1%
25	Louisiana	-	-	-	89	280	377	89	280	377	0.5%	0.1%	0.1%
26	South Dakota	-	-	-	-	277	366	-	277	366	-	0.1%	0.1%
27	Michigan	-	55	123	-	3	5	-	58	128	-	0.0%	0.0%
28	Oregon	-	6	15	-	2	3	-	9	17	-	0.0%	0.0%
29	North Carolina	-	5	11	-	-	-	-	5	11	-	0.0%	0.0%
30	Georgia	-	1	2	-	1	2	-	2	4	-	0.0%	0.0%
31	Idaho	-	2	4	-	-	-	-	2	4	-	0.0%	0.0%
32	Arizona	-	-	-	209	-	-	209	-	-	1.1%	-	-
33	Mississippi	-	-	-	694	-	-	694	-	-	3.8%	-	-
U.S. Total		7,120	146,785	327,791	11,207	108,111	149,287	18,327	254,896	477,078			

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Source: [EIA, Annual Coal Report, 2015](#)

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.

Table 2.2 Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2014
Million Short Tons

Rank (by demonstrated reserve base)	State	Underground			Surface			Total			Percent of Total		
		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	240	35,889	70,891	618	38,666	47,839	858	74,555	118,730	4.4%	29.2%	24.8%
2	Illinois	2,426	27,729	87,294	37	10,035	16,489	2,463	37,764	103,783	12.7%	14.8%	21.7%
3	Wyoming	35	22,918	42,441	6,878	13,683	16,525	6,913	36,601	58,966	35.7%	14.3%	12.3%
4	West Virginia	1,554	14,778	27,689	475	2,013	3,190	2,028	16,790	30,879	10.5%	6.6%	6.5%
5	Kentucky	767	6,845	15,915	122	7,230	12,520	889	14,075	28,435	4.6%	5.5%	5.9%
6	Pennsylvania	1,088	10,232	22,326	167	973	4,134	1,256	11,205	26,460	6.5%	4.4%	5.5%
7	Ohio	332	7,585	17,240	47	3,705	5,661	379	11,290	22,901	2.0%	4.4%	4.8%
8	Colorado	207	5,766	10,987	126	3,742	4,756	333	9,508	15,743	1.7%	3.7%	3.3%
9	Texas	-	-	-	703	9,169	11,911	703	9,169	11,911	3.6%	3.6%	2.5%
10	New Mexico	16	2,749	6,043	169	4,048	5,782	186	6,797	11,826	1.0%	2.7%	2.5%
11	Indiana	295	3,515	8,486	351	286	490	646	3,801	8,976	3.3%	1.5%	1.9%
12	North Dakota	-	-	-	1,003	6,657	8,726	1,003	6,657	8,726	5.2%	2.6%	1.8%
13	Alaska	-	2,335	5,423	53	483	668	53	2,818	6,091	0.3%	1.1%	1.3%
14	Missouri	-	689	1,479	1	3,154	4,506	1	3,843	5,985	0.0%	1.5%	1.3%
15	Utah	95	2,332	4,757	2	210	265	97	2,542	5,023	0.5%	1.0%	1.0%
16	Alabama	213	399	791	16	2,222	3,119	228	2,621	3,911	1.2%	1.0%	0.8%
17	Iowa	-	807	1,732	-	320	457	-	1,127	2,189	-	0.4%	0.5%
18	Oklahoma	8	570	1,223	1	220	314	9	790	1,537	0.0%	0.3%	0.3%
19	Virginia	230	491	874	23	306	477	253	796	1,351	1.3%	0.3%	0.3%
20	Washington	-	674	1,332	-	6	8	-	681	1,340	-	0.3%	0.3%
21	Kansas	-	-	-	-	679	970	-	679	970	-	0.3%	0.2%
22	Tennessee	1	273	497	-	171	252	1	443	749	0.0%	0.2%	0.2%
23	Maryland	8	307	561	14	31	45	22	338	606	0.1%	0.1%	0.1%
24	Arkansas	25	126	271	-	101	144	25	228	416	0.1%	0.1%	0.1%
25	Louisiana	-	-	-	92	283	382	92	283	382	0.5%	0.1%	0.1%
26	South Dakota	-	-	-	-	277	366	-	277	366	-	0.1%	0.1%
27	Michigan	-	55	123	-	3	5	-	58	128	-	0.0%	0.0%
28	Oregon	-	6	15	-	2	3	-	9	17	-	0.0%	0.0%
29	North Carolina	-	5	11	-	-	-	-	5	11	-	0.0%	0.0%
30	Georgia	-	1	2	-	1	2	-	2	4	-	0.0%	0.0%
31	Idaho	-	2	4	-	-	-	-	2	4	-	0.0%	0.0%
32	Arizona	-	-	-	216	-	-	216	-	-	1.1%	-	-
33	Mississippi	-	-	-	698	-	-	698	-	-	3.6%	-	-
	U.S. Total	7,542	147,079	328,410	11,810	108,676	150,005	19,351	255,755	478,415			

w = Withheld to avoid disclosure of individual company data

Source: [EIA, Annual Coal Report, 2014](#)

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.

Table 2.2 Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2013
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Rank (by demonstrated reserve base)	State	Underground			Surface			Total			Percent of Total		
		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	252	35,897	70,907	599	38,704	47,885	851	74,600	118,792	4.3%	29.1%	24.8%
2	Illinois	2,509	27,762	87,400	43	10,039	16,495	2,552	37,802	103,895	12.9%	14.7%	21.6%
3	Wyoming	38	22,922	42,447	7,443	14,090	17,015	7,481	37,011	59,463	37.9%	14.4%	12.4%
4	West Virginia	1,245	14,862	27,846	486	2,037	3,228	1,732	16,898	31,074	8.8%	6.6%	6.5%
5	Kentucky	870	6,895	16,021	184	7,247	12,551	1,054	14,143	28,571	5.3%	5.5%	6.0%
6	Pennsylvania	377	10,292	22,438	183	979	4,144	559	11,271	26,582	2.8%	4.4%	5.5%
7	Ohio	348	7,598	17,271	53	3,711	5,669	401	11,309	22,940	2.0%	4.4%	4.8%
8	Colorado	244	5,788	11,029	127	3,743	4,758	371	9,531	15,787	1.9%	3.7%	3.3%
9	Texas	-	-	-	704	9,211	11,966	704	9,211	11,966	3.6%	3.6%	2.5%
10	New Mexico	25	2,758	6,061	316	4,060	5,799	342	6,818	11,860	1.7%	2.7%	2.5%
11	Indiana	306	3,530	8,522	350	302	516	656	3,832	9,039	3.3%	1.5%	1.9%
12	North Dakota	-	-	-	1,087	6,685	8,763	1,087	6,685	8,763	5.5%	2.6%	1.8%
13	Alaska	-	2,335	5,423	54	485	670	54	2,820	6,092	0.3%	1.1%	1.3%
14	Missouri	-	689	1,479	1	3,155	4,506	1	3,844	5,985	0.0%	1.5%	1.2%
15	Utah	154	2,349	4,792	3	210	266	157	2,560	5,058	0.8%	1.0%	1.1%
16	Alabama	337	412	817	47	2,225	3,124	383	2,637	3,940	1.9%	1.0%	0.8%
17	Iowa	-	807	1,732	-	320	457	-	1,127	2,189	-	0.4%	0.5%
18	Oklahoma	8	570	1,224	1	220	314	9	790	1,539	0.0%	0.3%	0.3%
19	Virginia	203	503	896	57	309	482	261	812	1,378	1.3%	0.3%	0.3%
20	Washington	-	674	1,332	-	6	8	-	681	1,340	-	0.3%	0.3%
21	Kansas	-	-	-	-	680	971	-	680	971	-	0.3%	0.2%
22	Tennessee	2	273	498	1	171	252	3	444	751	0.0%	0.2%	0.2%
23	Maryland	15	308	562	7	32	47	21	340	609	0.1%	0.1%	0.1%
24	Arkansas	25	127	272	-	101	144	25	228	416	0.1%	0.1%	0.1%
25	Louisiana	-	-	-	115	285	385	115	285	385	0.6%	0.1%	0.1%
26	South Dakota	-	-	-	-	277	366	-	277	366	-	0.1%	0.1%
27	Michigan	-	55	123	-	3	5	-	58	128	-	0.0%	0.0%
28	Oregon	-	6	15	-	2	3	-	9	17	-	0.0%	0.0%
29	North Carolina	-	5	11	-	-	-	-	5	11	-	0.0%	0.0%
30	Idaho	-	2	4	-	-	-	-	2	4	-	0.0%	0.0%
31	Georgia	-	1	2	-	1	2	-	2	4	-	0.0%	0.0%
32	Mississippi	-	-	-	701	-	-	701	-	-	3.6%	-	-
33	Arizona	-	-	-	224	-	-	224	-	-	1.1%	-	-
	U.S. Total	6,959	147,420	329,125	12,786	109,289	150,789	19,745	256,709	479,914			

w = Withheld to avoid disclosure of individual company data

Source: [EIA, Annual Coal Report, 2013](#)

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.

Table 2.2 Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2012
Million Short Tons

Rank (by demonstrated reserve base)	State	Underground			Surface			Total			Percent of Total		
		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	w	35,906	70,925	w	38,738	47,927	960	74,644	118,851	5.1%	29.0%	24.7%
2	Illinois	w	27,792	87,493	w	10,044	16,502	2,215	37,835	103,995	11.9%	14.7%	21.6%
3	Wyoming	w	22,926	42,456	w	14,487	17,495	6,932	37,413	59,951	37.1%	14.5%	12.5%
4	West Virginia	1,337	14,949	28,010	505	2,064	3,271	1,842	17,013	31,281	9.9%	6.6%	6.5%
5	Kentucky	1,071	6,947	16,130	192	7,266	12,583	1,263	14,213	28,713	6.8%	5.5%	6.0%
6	Pennsylvania	355	10,337	22,522	199	985	4,155	554	11,322	26,677	3.0%	4.4%	5.5%
7	Ohio	w	7,614	17,306	w	3,717	5,679	235	11,331	22,985	1.3%	4.4%	4.8%
8	Colorado	w	5,811	11,073	w	3,744	4,759	300	9,555	15,832	1.6%	3.7%	3.3%
9	Texas	-	-	-	751	9,252	12,019	751	9,252	12,019	4.0%	3.6%	2.5%
10	New Mexico	w	2,763	6,073	w	4,075	5,819	497	6,838	11,892	2.7%	2.7%	2.5%
11	Indiana	252	3,544	8,556	348	318	544	600	3,862	9,100	3.2%	1.5%	1.9%
12	North Dakota	-	-	-	1,128	6,711	8,797	1,128	6,711	8,797	6.0%	2.6%	1.8%
13	Alaska	-	2,335	5,423	w	487	672	w	2,821	6,094	-	1.1%	1.3%
14	Missouri	-	689	1,479	w	3,155	4,507	w	3,844	5,986	-	1.5%	1.2%
15	Utah	w	2,365	4,825	w	211	267	199	2,576	5,091	1.1%	1.0%	1.1%
16	Alabama	209	425	844	56	2,230	3,130	265	2,655	3,974	1.4%	1.0%	0.8%
17	Iowa	-	807	1,732	-	320	457	-	1,127	2,189	-	0.4%	0.5%
18	Oklahoma	w	571	1,225	w	221	315	11	791	1,540	0.1%	0.3%	0.3%
19	Virginia	234	517	920	49	312	488	283	829	1,408	1.5%	0.3%	0.3%
20	Washington	-	674	1,332	-	6	8	-	681	1,340	-	0.3%	0.3%
21	Kansas	-	-	-	-	680	971	-	680	971	-	0.3%	0.2%
22	Tennessee	w	274	500	w	171	253	4	445	753	0.0%	0.2%	0.2%
23	Maryland	w	309	564	w	33	48	34	342	612	0.2%	0.1%	0.1%
24	Arkansas	w	127	272	-	101	144	w	228	416	-	0.1%	0.1%
25	Louisiana	-	-	-	w	288	388	w	288	388	-	0.1%	0.1%
26	South Dakota	-	-	-	-	277	366	-	277	366	-	0.1%	0.1%
27	Michigan	-	55	123	-	3	5	-	58	128	-	0.0%	0.0%
28	Oregon	-	6	15	-	2	3	-	9	17	-	0.0%	0.0%
29	North Carolina	-	5	11	-	-	-	-	5	11	-	0.0%	0.0%
30	Idaho	-	2	4	-	-	-	-	2	4	-	0.0%	0.0%
31	Georgia	-	1	2	-	1	2	-	2	4	-	0.0%	0.0%
32	Mississippi	-	-	-	w	-	-	w	-	-	-	-	-
33	Arizona	-	-	-	w	-	-	w	-	-	-	-	-
U.S. Total		6,656	147,750	329,814	12,008	109,898	151,571	18,664	257,648	481,385			

w = Withheld to avoid disclosure of individual company data

Source: [EIA, Annual Coal Report, 2012](#)

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.

Table 2.2 Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2011
Million Short Tons

Rank (by demonstrated reserve base)	State	Underground			Surface			Total			Percent of Total		
		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	w	35,911	70,936	w	38,770	47,965	846	74,681	118,901	4.4%	28.9%	24.6%
2	Illinois	w	27,819	87,578	w	10,048	16,510	2,311	37,867	104,088	12.0%	14.6%	21.6%
3	Wyoming	w	22,931	42,466	w	14,898	17,991	6,898	37,829	60,456	35.9%	14.6%	12.5%
4	West Virginia	1,546	15,035	28,171	530	2,095	3,321	2,076	17,130	31,492	10.8%	6.6%	6.5%
5	Kentucky	1,193	7,003	16,246	226	7,289	12,624	1,419	14,292	28,870	7.4%	5.5%	6.0%
6	Pennsylvania	413	10,385	22,612	202	992	4,167	615	11,377	26,780	3.2%	4.4%	5.5%
7	Ohio	197	7,630	17,342	61	3,724	5,689	258	11,354	23,031	1.3%	4.4%	4.8%
8	Colorado	w	5,839	11,126	w	3,744	4,759	225	9,583	15,885	1.2%	3.7%	3.3%
9	Texas	-	-	-	736	9,294	12,074	736	9,294	12,074	3.8%	3.6%	2.5%
10	New Mexico	w	2,768	6,083	w	4,092	5,840	518	6,860	11,923	2.7%	2.7%	2.5%
11	Indiana	310	3,556	8,587	343	334	570	654	3,890	9,158	3.4%	1.5%	1.9%
12	North Dakota	-	-	-	1,183	6,737	8,832	1,183	6,737	8,832	6.2%	2.6%	1.8%
13	Alaska	-	2,335	5,423	w	489	674	w	2,823	6,097	-	1.1%	1.3%
14	Missouri	-	689	1,479	w	3,155	4,507	w	3,845	5,986	-	1.5%	1.2%
15	Utah	201	2,381	4,857	-	212	268	201	2,593	5,125	1.0%	1.0%	1.1%
16	Alabama	249	438	869	56	2,236	3,139	306	2,674	4,007	1.6%	1.0%	0.8%
17	Iowa	-	807	1,732	-	320	457	-	1,127	2,189	-	0.4%	0.5%
18	Oklahoma	w	571	1,226	w	221	316	11	792	1,542	0.1%	0.3%	0.3%
19	Virginia	299	531	945	49	318	496	348	848	1,441	1.8%	0.3%	0.3%
20	Washington	-	674	1,332	-	6	8	-	681	1,340	-	0.3%	0.3%
21	Kansas	-	-	-	w	680	971	w	680	971	-	0.3%	0.2%
22	Tennessee	w	275	501	w	172	253	8	446	754	0.0%	0.2%	0.2%
23	Maryland	w	310	565	w	34	50	36	344	615	0.2%	0.1%	0.1%
24	Arkansas	w	127	272	-	101	144	w	228	416	-	0.1%	0.1%
25	Louisiana	-	-	-	w	291	393	w	291	393	-	0.1%	0.1%
26	South Dakota	-	-	-	-	277	366	-	277	366	-	0.1%	0.1%
27	Michigan	-	55	123	-	3	5	-	58	128	-	0.0%	0.0%
28	Oregon	-	6	15	-	2	3	-	9	17	-	0.0%	0.0%
29	North Carolina	-	5	11	-	-	-	-	5	11	-	0.0%	0.0%
30	Idaho	-	2	4	-	-	-	-	2	4	-	0.0%	0.0%
31	Georgia	-	1	2	-	1	2	-	2	4	-	0.0%	0.0%
32	Mississippi	-	-	-	w	-	-	w	-	-	-	-	-
33	Arizona	-	-	-	w	-	-	w	-	-	-	-	-
U.S. Total		7,263	148,084	330,504	11,960	110,535	152,393	19,223	258,619	482,898			

w = Withheld to avoid disclosure of individual company data

Source: [EIA, Annual Coal Report, 2011](#)

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.

Table 2.2 Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2010
Million Short Tons

Rank (by demonstrated reserve base)	State	Underground			Surface			Total			Percent of Total		
		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	w	35,917	70,946	w	38,808	48,012	894	74,724	118,958	5.0%	28.8%	24.6%
2	Illinois	1,535	27,840	87,644	24	10,052	16,516	1,559	37,892	104,160	8.7%	14.6%	21.5%
3	Wyoming	w	22,935	42,472	w	15,349	18,535	6,610	38,284	61,007	36.9%	14.8%	12.6%
4	West Virginia	1,469	15,124	28,338	503	2,135	3,385	1,972	17,259	31,723	11.0%	6.7%	6.5%
5	Kentucky	1,109	7,067	16,377	261	7,321	12,678	1,370	14,388	29,055	7.6%	5.5%	6.0%
6	Pennsylvania	454	10,435	22,707	117	1,001	4,182	571	11,436	26,889	3.2%	4.4%	5.5%
7	Ohio	194	7,646	17,380	74	3,731	5,700	268	11,378	23,080	1.5%	4.4%	4.8%
8	Colorado	w	5,865	11,175	w	3,745	4,759	253	9,609	15,935	1.4%	3.7%	3.3%
9	Texas	-	-	-	738	9,339	12,132	738	9,339	12,132	4.1%	3.6%	2.5%
10	New Mexico	w	2,771	6,091	w	4,110	5,863	340	6,881	11,954	1.9%	2.7%	2.5%
11	Indiana	309	3,570	8,620	363	349	597	672	3,919	9,217	3.7%	1.5%	1.9%
12	North Dakota	-	-	-	1,229	6,764	8,867	1,229	6,764	8,867	6.9%	2.6%	1.8%
13	Alaska	-	2,335	5,423	w	491	677	w	2,825	6,100	-	1.1%	1.3%
14	Missouri	-	689	1,479	w	3,156	4,508	w	3,845	5,987	-	1.5%	1.2%
15	Utah	210	2,401	4,897	-	212	268	210	2,612	5,164	1.2%	1.0%	1.1%
16	Alabama	269	449	890	36	2,243	3,149	305	2,692	4,039	1.7%	1.0%	0.8%
17	Iowa	-	807	1,732	-	320	457	-	1,127	2,189	-	0.4%	0.5%
18	Oklahoma	w	571	1,227	w	222	317	24	793	1,544	0.1%	0.3%	0.3%
19	Virginia	281	548	976	56	171	505	337	719	1,481	1.9%	0.3%	0.3%
20	Washington	-	674	1,332	-	6	8	-	681	1,340	-	0.3%	0.3%
21	Kansas	-	-	-	w	680	971	w	680	971	-	0.3%	0.2%
22	Tennessee	w	275	502	w	173	255	6	448	757	0.0%	0.2%	0.2%
23	Maryland	w	311	567	w	36	53	16	346	620	0.1%	0.1%	0.1%
24	Arkansas	-	127	272	-	101	144	-	228	416	-	0.1%	0.1%
25	Louisiana	-	-	-	w	295	398	w	295	398	-	0.1%	0.1%
26	South Dakota	-	-	-	-	277	366	-	277	366	-	0.1%	0.1%
27	Michigan	-	55	123	-	3	5	-	59	128	-	0.0%	0.0%
28	Oregon	-	6	15	-	2	3	-	9	17	-	0.0%	0.0%
29	North Carolina	-	5	11	-	-	-	-	5	11	-	0.0%	0.0%
30	Idaho	-	2	4	-	-	-	-	2	4	-	0.0%	0.0%
31	Georgia	-	1	2	-	1	2	-	2	4	-	0.0%	0.0%
32	Mississippi	-	-	-	w	-	-	w	-	-	-	-	-
33	Arizona	-	-	-	w	-	-	w	-	-	-	-	-
U.S. Total		6,452	148,427	331,202	11,485	111,091	153,309	17,937	259,518	484,511			

w = Withheld to avoid disclosure of individual company data

Source: [EIA, Annual Coal Report, 2010](#)

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.

Table 2.2 Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2009
 Million Short Tons

Rank (by demonstrated reserve base)	State	Underground			Surface			Total			Percent of Total		
		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	w	35,921	70,955	w	38,849	48,062	855	74,770	119,017	4.9%	28.7%	24.5%
2	Illinois	1,217	27,858	87,700	27	10,055	16,522	1,244	37,913	104,222	7.1%	14.6%	21.4%
3	Wyoming	w	22,939	42,479	w	15,804	19,084	6,917	38,743	61,563	39.6%	14.9%	12.7%
4	West Virginia	1,237	15,214	28,507	494	2,175	3,448	1,731	17,390	31,955	9.9%	6.7%	6.6%
5	Kentucky	1,041	7,131	16,505	261	7,350	12,729	1,303	14,480	29,234	7.5%	5.6%	6.0%
6	Pennsylvania	446	10,486	22,802	107	1,009	4,195	553	11,495	26,998	3.2%	4.4%	5.6%
7	Ohio	210	7,662	17,415	81	3,739	5,712	291	11,401	23,127	1.7%	4.4%	4.8%
8	Colorado	w	5,889	11,222	w	3,745	4,760	314	9,634	15,981	1.8%	3.7%	3.3%
9	Texas	-	-	-	775	9,378	12,183	775	9,378	12,183	4.4%	3.6%	2.5%
10	New Mexico	w	2,776	6,101	w	4,123	5,883	380	6,899	11,984	2.2%	2.6%	2.5%
11	Indiana	304	3,582	8,649	98	364	623	403	3,946	9,271	2.3%	1.5%	1.9%
12	North Dakota	-	-	-	1,208	6,792	8,903	1,208	6,792	8,903	6.9%	2.6%	1.8%
13	Alaska	-	2,335	5,423	w	493	680	w	2,828	6,102	-	1.1%	1.3%
14	Missouri	-	689	1,479	w	3,156	4,508	w	3,845	5,988	-	1.5%	1.2%
15	Utah	201	2,419	4,935	-	212	268	201	2,631	5,203	1.2%	1.0%	1.1%
16	Alabama	241	461	915	45	2,250	3,158	286	2,711	4,074	1.6%	1.0%	0.8%
17	Iowa	-	807	1,732	-	320	457	-	1,127	2,189	-	0.4%	0.5%
18	Oklahoma	w	572	1,227	w	223	318	94	794	1,545	0.5%	0.3%	0.3%
19	Virginia	253	564	1,004	42	171	515	296	735	1,519	1.7%	0.3%	0.3%
20	Washington	-	674	1,332	-	6	8	-	681	1,340	-	0.3%	0.3%
21	Kansas	-	-	-	w	680	971	w	680	971	-	0.3%	0.2%
22	Tennessee	w	276	503	w	174	256	13	449	759	0.1%	0.2%	0.2%
23	Maryland	w	312	568	w	37	55	20	349	623	0.1%	0.1%	0.1%
24	Arkansas	-	127	272	-	101	144	-	228	416	-	0.1%	0.1%
25	Louisiana	-	-	-	w	299	403	w	299	403	-	0.1%	0.1%
26	South Dakota	-	-	-	-	277	366	-	277	366	-	0.1%	0.1%
27	Michigan	-	55	123	-	3	5	-	59	128	-	0.0%	0.0%
28	Oregon	-	6	15	-	2	3	-	9	17	-	0.0%	0.0%
29	North Carolina	-	5	11	-	-	-	-	5	11	-	0.0%	0.0%
30	Idaho	-	2	4	-	-	-	-	2	4	-	0.0%	0.0%
31	Georgia	-	1	2	-	1	2	-	2	4	-	0.0%	0.0%
32	Mississippi	-	-	-	w	-	-	w	-	-	-	-	-
33	Arizona	-	-	-	w	-	-	w	-	-	-	-	-
U.S. Total		5,799	148,763	331,882	11,669	111,788	154,220	17,468	260,551	486,102			

w = Withheld to avoid disclosure of individual company data

Source: [EIA, Annual Coal Report, 2009](#)

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.

Table 2.2 Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2008
Million Short Tons

Rank (by demonstrated reserve base)	State	Underground			Surface			Total			Percent of Total		
		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	w	35,922	70,957	w	38,889	48,110	925	74,810	119,067	5.2%	28.6%	24.4%
2	Illinois	1,146	27,876	87,757	43	10,060	16,529	1,189	37,935	104,286	6.7%	14.5%	21.4%
3	Wyoming	w	22,943	42,486	w	16,247	19,618	7,010	39,190	62,104	39.2%	15.0%	12.7%
4	West Virginia	1,410	15,300	28,669	498	2,220	3,518	1,908	17,520	32,187	10.7%	6.7%	6.6%
5	Kentucky	923	7,194	16,631	244	7,381	12,784	1,167	14,575	29,416	6.5%	5.6%	6.0%
6	Pennsylvania	424	10,538	22,900	102	1,016	4,207	526	11,554	27,107	2.9%	4.4%	5.6%
7	Ohio	221	7,677	17,450	86	3,747	5,725	308	11,424	23,174	1.7%	4.4%	4.8%
8	Colorado	w	5,916	11,273	w	3,745	4,760	325	9,661	16,033	1.8%	3.7%	3.3%
9	Texas	-	-	-	752	9,412	12,227	752	9,412	12,227	4.2%	3.6%	2.5%
10	New Mexico	w	2,782	6,114	w	4,140	5,906	605	6,922	12,020	3.4%	2.6%	2.5%
11	Indiana	298	3,593	8,674	123	381	651	421	3,973	9,325	2.4%	1.5%	1.9%
12	North Dakota	-	-	-	1,225	6,821	8,941	1,225	6,821	8,941	6.9%	2.6%	1.8%
13	Alaska	-	2,335	5,423	w	495	682	w	2,829	6,105	-	1.1%	1.3%
14	Missouri	-	689	1,479	w	3,157	4,509	w	3,846	5,988	-	1.5%	1.2%
15	Utah	212	2,441	4,979	-	212	268	212	2,652	5,246	1.2%	1.0%	1.1%
16	Alabama	279	473	938	51	2,256	3,167	330	2,729	4,106	1.8%	1.0%	0.8%
17	Iowa	-	807	1,732	-	320	457	-	1,127	2,189	-	0.4%	0.4%
18	Virginia	172	578	1,030	44	171	525	217	750	1,555	1.2%	0.3%	0.3%
19	Oklahoma	w	572	1,228	w	223	319	85	795	1,547	0.5%	0.3%	0.3%
20	Washington	-	674	1,332	-	6	8	-	681	1,340	-	0.3%	0.3%
21	Kansas	-	-	-	w	680	971	w	680	971	-	0.3%	0.2%
22	Tennessee	2	227	505	8	175	258	10	451	762	0.1%	0.2%	0.2%
23	Maryland	w	312	569	w	39	57	22	351	627	0.1%	0.1%	0.1%
24	Arkansas	w	127	272	-	101	144	w	228	416	-	0.1%	0.1%
25	Louisiana	-	-	-	w	302	408	w	302	408	-	0.1%	0.1%
26	South Dakota	-	-	-	-	277	366	-	277	366	-	0.1%	0.1%
27	Michigan	-	55	123	-	3	5	-	59	128	-	0.0%	0.0%
28	Oregon	-	6	15	-	2	3	-	9	17	-	0.0%	0.0%
29	North Carolina	-	5	11	-	-	-	-	5	11	-	0.0%	0.0%
30	Idaho	-	2	4	-	-	-	-	2	4	-	0.0%	0.0%
31	Georgia	-	1	2	-	1	2	-	2	4	-	0.0%	0.0%
32	Mississippi	-	-	-	w	-	-	w	-	-	-	-	-
33	Arizona	-	-	-	w	-	-	w	-	-	-	-	-
U.S. Total		5,819	149,095	332,553	12,057	112,477	155,124	17,875	261,573	487,678			

w = Withheld to avoid disclosure of individual company data

Source: [EIA, Annual Coal Report, 2008](#)

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.

Table 2.2 Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2007
Million Short Tons

Rank (by demonstrated reserve base)	State	Underground			Surface			Total			Percent of Total		
		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	w	35,922	70,957	w	38,934	48,166	1,251	74,856	119,123	6.7%	28.5%	24.3%
2	Illinois	1,253	27,893	87,811	33	10,064	16,536	1,286	37,957	104,347	6.9%	14.4%	21.3%
3	Wyoming	w	22,946	42,493	w	16,728	20,198	7,330	39,674	62,692	39.4%	15.1%	12.8%
4	West Virginia	1,285	15,395	28,845	543	2,274	3,605	1,828	17,669	32,450	9.8%	6.7%	6.6%
5	Kentucky	886	7,265	16,770	296	7,417	12,848	1,182	14,682	29,618	6.4%	5.6%	6.1%
6	Pennsylvania	427	10,595	23,006	105	1,026	4,222	532	11,621	27,228	2.9%	4.4%	5.6%
7	Ohio	230	7,692	17,484	103	3,755	5,736	333	11,447	23,220	1.8%	4.4%	4.7%
8	Colorado	w	5,946	11,331	w	3,746	4,761	328	9,692	16,092	1.8%	3.7%	3.3%
9	Texas	-	-	-	737	4,994	12,276	737	9,449	12,276	4.0%	3.6%	2.5%
10	New Mexico	w	2,788	6,128	w	4,156	5,929	483	6,944	12,057	2.6%	2.6%	2.5%
11	Indiana	272	3,603	8,699	129	398	681	401	4,001	9,379	2.2%	1.5%	1.9%
12	North Dakota	-	-	-	1,252	6,849	8,978	1,252	6,849	8,978	6.7%	2.6%	1.8%
13	Alaska	-	2,335	5,423	w	496	684	w	2,831	6,107	-	1.1%	1.2%
14	Missouri	-	689	1,479	w	3,157	4,509	w	3,846	5,988	-	1.5%	1.2%
15	Utah	211	2,465	5,028	-	212	268	211	2,676	5,295	1.1%	1.0%	1.1%
16	Alabama	275	485	963	52	2,264	3,178	327	2,749	4,141	1.8%	1.0%	0.8%
17	Iowa	-	807	1,732	-	320	457	-	1,127	2,189	-	0.4%	0.4%
18	Virginia	208	596	1,062	48	171	536	256	767	1,598	1.4%	0.3%	0.3%
19	Oklahoma	w	573	1,229	w	224	320	155	797	1,549	0.8%	0.3%	0.3%
20	Washington	-	674	1,332	-	6	8	-	681	1,340	-	0.3%	0.3%
21	Kansas	-	-	-	w	680	971	w	680	971	-	0.3%	0.2%
22	Tennessee	2	277	506	10	176	260	12	454	766	0.1%	0.2%	0.2%
23	Maryland	w	313	571	w	41	60	24	354	631	0.1%	0.1%	0.1%
24	Arkansas	w	127	272	-	101	144	w	228	417	-	0.1%	0.1%
25	Louisiana	-	-	-	w	306	412	w	306	412	-	0.1%	0.1%
26	South Dakota	-	-	-	-	277	366	-	277	366	-	0.1%	0.1%
27	Michigan	-	55	123	-	3	5	-	59	128	-	0.0%	0.0%
28	Oregon	-	6	15	-	2	3	-	9	17	-	0.0%	0.0%
29	North Carolina	-	5	11	-	-	-	-	5	11	-	0.0%	0.0%
30	Idaho	-	2	4	-	-	-	-	2	4	-	0.0%	0.0%
31	Georgia	-	1	2	-	1	2	-	2	4	-	0.0%	0.0%
32	Mississippi	-	-	-	w	-	-	w	-	-	-	-	-
33	Arizona	-	-	-	w	-	-	w	-	-	-	-	-
U.S. Total		5,827	149,457	333,277	12,757	113,232	156,118	18,584	262,689	489,395			

w = Withheld to avoid disclosure of individual company data

Source: [EIA, Annual Coal Report, 2007](#)

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.

Table 2.2 Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2006
Million Short Tons

Rank (by demonstrated reserve base)	State	Underground			Surface			Total			Percent of Total		
		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	w	35,922	70,957	w	38,979	48,220	1,211	74,901	119,177	6.4%	28.4%	24.3%
2	Illinois	1,255	27,910	87,865	40	10,068	16,543	1,294	37,978	104,408	6.9%	14.4%	21.3%
3	Wyoming	w	22,949	42,499	w	17,195	20,762	7,890	40,144	63,261	41.8%	15.2%	12.9%
4	West Virginia	1,206	15,485	29,015	588	2,329	3,691	1,793	17,814	32,706	9.5%	6.8%	6.7%
5	Kentucky	962	7,336	16,909	171	7,449	12,906	1,134	14,785	29,814	6.0%	5.6%	6.1%
6	Pennsylvania	468	10,652	23,113	79	1,035	4,236	548	11,687	27,349	2.9%	4.4%	5.6%
7	Ohio	192	7,706	17,515	99	3,760	5,745	291	11,466	23,260	1.5%	4.3%	4.7%
8	Colorado	w	5,981	11,397	w	3,746	4,761	335	9,727	16,158	1.8%	3.7%	3.3%
9	Texas	-	-	-	730	9,490	12,328	730	9,490	12,328	3.9%	3.6%	2.5%
10	New Mexico	w	2,794	6,142	w	4,171	5,951	504	6,965	12,093	2.7%	2.6%	2.5%
11	Indiana	249	3,611	8,720	135	416	711	384	4,027	9,431	2.0%	1.5%	1.9%
12	North Dakota	-	-	-	1,145	6,877	9,015	1,145	6,877	9,015	6.1%	2.6%	1.8%
13	Alaska	-	2,335	5,423	w	497	685	w	2,832	6,108	-	1.1%	1.2%
14	Missouri	-	689	1,479	w	3,157	4,510	w	3,846	5,989	-	1.5%	1.2%
15	Utah	243	2,488	5,076	-	212	268	243	2,700	5,344	1.3%	1.0%	1.1%
16	Alabama	280	497	986	56	2,271	3,188	336	2,767	4,174	1.8%	1.0%	0.8%
17	Iowa	-	807	1,732	-	320	457	-	1,127	2,189	-	0.4%	0.4%
18	Virginia	223	614	1,093	51	171	548	273	785	1,642	1.4%	0.3%	0.3%
19	Oklahoma	w	573	1,230	w	225	321	23	798	1,551	0.1%	0.3%	0.3%
20	Washington	-	674	1,332	w	6	8	w	681	1,340	-	0.3%	0.3%
21	Kansas	-	-	-	w	680	972	w	680	972	-	0.3%	0.2%
22	Tennessee	12	278	508	8	178	262	21	456	770	0.1%	0.2%	0.2%
23	Maryland	w	314	572	w	42	62	28	356	634	0.1%	0.1%	0.1%
24	Arkansas	w	127	272	-	101	144	w	228	417	-	0.1%	0.1%
25	Louisiana	-	-	-	w	309	416	w	309	416	-	0.1%	0.1%
26	South Dakota	-	-	-	-	277	366	-	277	366	-	0.1%	0.1%
27	Michigan	-	55	123	-	3	5	-	59	128	-	0.0%	0.0%
28	Oregon	-	6	15	-	2	3	-	9	17	-	0.0%	0.0%
29	North Carolina	-	5	11	-	-	-	-	5	11	-	0.0%	0.0%
30	Idaho	-	2	4	-	-	-	-	2	4	-	0.0%	0.0%
31	Georgia	-	1	2	-	1	2	-	2	4	-	0.0%	0.0%
32	Mississippi	-	-	-	w	-	-	w	-	-	-	-	-
33	Arizona	-	-	-	w	-	-	w	-	-	-	-	-
U.S. Total		5,897	149,814	333,991	12,983	113,967	157,085	18,880	263,781	491,076			

w = Withheld to avoid disclosure of individual company data

Source: [EIA, Annual Coal Report, 2006](#)

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.

Table 2.2 Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2005
 Million Short Tons

Rank (by demonstrated reserve base)	State	Underground			Surface			Total			Percent of Total		
		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	w	35,922	70,958	w	39,021	48,272	1,234	74,944	119,230	6.5%	28.0%	24.2%
2	Illinois	708	27,927	87,919	40	10,073	16,550	747	38,000	104,469	3.9%	14.2%	21.2%
3	Wyoming	w	22,950	42,500	w	17,657	21,319	7,975	40,607	63,819	42.1%	15.2%	12.9%
4	West Virginia	1,179	15,576	29,184	562	2,382	3,775	1,741	17,958	32,960	9.2%	6.7%	6.7%
5	Kentucky	965	7,411	17,055	204	7,483	12,965	1,169	14,894	30,020	6.2%	5.6%	6.1%
6	Pennsylvania	520	10,710	23,221	96	1,044	4,251	616	11,754	27,472	3.3%	4.4%	5.6%
7	Ohio	205	7,719	17,546	166	3,767	5,754	371	11,486	23,300	2.0%	4.3%	4.7%
8	Colorado	338	6,015	11,461	44	3,747	4,762	382	9,761	16,223	2.0%	3.6%	3.3%
9	Texas	-	-	-	772	9,534	12,385	772	9,534	12,385	4.1%	3.6%	2.5%
10	New Mexico	w	2,801	6,156	w	4,188	5,975	526	6,988	12,131	2.8%	2.6%	2.5%
11	Indiana	249	3,620	8,741	133	434	742	382	4,054	9,483	2.0%	1.5%	1.9%
12	North Dakota	-	-	-	1,214	6,906	9,053	1,214	6,906	9,053	6.4%	2.6%	1.8%
13	Alaska	-	2,335	5,423	w	499	687	w	2,834	6,110	-	1.1%	1.2%
14	Missouri	-	689	1,479	w	3,157	4,510	w	3,847	5,989	-	1.4%	1.2%
15	Utah	281	2,514	5,128	-	212	268	281	2,726	5,396	1.5%	1.0%	1.1%
16	Alabama	306	508	1,007	50	2,278	3,198	355	2,785	4,205	1.9%	1.0%	0.9%
17	Iowa	-	807	1,732	-	320	457	-	1,127	2,189	-	0.4%	0.4%
18	Virginia	235	2,949	1,130	59	171	562	294	3,121	1,693	1.6%	1.2%	0.3%
19	Oklahoma	w	574	1,231	w	226	323	15	800	1,554	0.1%	0.3%	0.3%
20	Washington	-	1,030	1,332	w	6	8	w	1,036	1,340	-	0.4%	0.3%
21	Kansas	-	-	-	w	681	972	w	681	972	-	0.3%	0.2%
22	Tennessee	8	280	510	11	179	264	19	459	774	0.1%	0.2%	0.2%
23	Maryland	w	317	578	w	44	65	35	361	643	0.2%	0.1%	0.1%
24	Louisiana	-	-	-	w	312	422	w	312	422	-	0.1%	0.1%
25	Arkansas	-	127	272	-	101	144	-	228	417	-	0.1%	0.1%
26	South Dakota	-	-	-	-	277	366	-	277	366	-	0.1%	0.1%
27	Idaho	-	2	160	-	-	-	-	2	160	-	0.0%	0.0%
28	Michigan	-	55	123	-	3	5	-	59	128	-	0.0%	0.0%
29	Oregon	-	6	15	-	2	3	-	9	17	-	0.0%	0.0%
30	North Carolina	-	5	11	-	-	-	-	5	11	-	0.0%	0.0%
31	Georgia	-	1	2	-	1	2	-	2	4	-	0.0%	0.0%
32	Mississippi	-	-	-	w	-	-	w	-	-	-	-	-
33	Arizona	-	-	-	w	-	-	w	-	-	-	-	-
U.S. Total		5,502	152,850	334,876	13,442	114,705	158,059	18,944	267,554	492,935			

w = Withheld to avoid disclosure of individual company data

Source: [EIA, Annual Coal Report, 2005](#)

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.

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		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	w	35,922	70,958	w	39,067	48,322	1,140	74,989	119,280	6.3%	28.1%	24.1%
2	Illinois	760	27,944	87,972	36	10,075	16,557	796	38,019	104,529	4.4%	14.2%	21.1%
3	Wyoming	w	22,950	42,501	w	18,853	21,824	7,053	41,804	64,325	38.9%	15.6%	13.0%
4	West Virginia	1,136	15,673	29,366	382	2,431	3,854	1,518	18,104	33,220	8.4%	6.8%	6.7%
5	Kentucky	948	7,488	17,202	181	7,516	13,023	1,129	15,004	30,225	6.2%	5.6%	6.1%
6	Pennsylvania	521	10,768	23,330	93	1,055	4,267	614	11,822	27,597	3.4%	4.4%	5.6%
7	Ohio	199	7,733	17,577	119	3,774	5,765	318	11,507	23,342	1.8%	4.3%	4.7%
8	Colorado	362	6,050	11,529	53	3,748	4,764	415	9,798	16,293	2.3%	3.7%	3.3%
9	Texas	-	-	-	546	9,578	12,442	546	9,578	12,442	3.0%	3.6%	2.5%
10	New Mexico	w	2,848	6,171	w	4,086	6,001	1,304	6,934	12,172	7.2%	2.6%	2.5%
11	Indiana	256	3,630	8,764	142	451	771	398	4,080	9,534	2.2%	1.5%	1.9%
12	North Dakota	-	-	-	1,191	6,935	9,090	1,191	6,935	9,090	6.6%	2.6%	1.8%
13	Alaska	-	2,745	5,423	w	545	689	w	3,291	6,112	-	1.2%	1.2%
14	Missouri	-	689	1,479	w	3,158	4,511	w	3,847	5,990	-	1.4%	1.2%
15	Utah	317	2,538	5,177	-	212	268	317	2,750	5,445	1.7%	1.0%	1.1%
16	Alabama	308	521	1,034	33	2,285	3,208	341	2,806	4,242	1.9%	1.0%	0.9%
17	Iowa	-	807	1,732	-	320	457	-	1,127	2,189	-	0.4%	0.4%
18	Virginia	200	653	1,163	50	369	576	250	1,022	1,740	1.4%	0.4%	0.4%
19	Oklahoma	w	574	1,232	w	227	325	17	801	1,557	0.1%	0.3%	0.3%
20	Washington	-	674	1,332	w	7	8	w	681	1,341	-	0.3%	0.3%
21	Kansas	-	-	-	w	681	973	w	681	973	-	0.3%	0.2%
22	Tennessee	7	281	513	19	180	266	26	462	779	0.1%	0.2%	0.2%
23	Maryland	w	320	584	w	46	67	17	366	652	0.1%	0.1%	0.1%
24	Louisiana	-	-	-	w	316	427	w	316	427	-	0.1%	0.1%
25	Arkansas	-	127	272	-	101	144	-	228	417	-	0.1%	0.1%
26	South Dakota	-	-	-	-	277	366	-	277	366	-	0.1%	0.1%
27	Michigan	-	55	123	-	3	5	-	59	128	-	0.0%	0.0%
28	Oregon	-	7	15	-	2	3	-	9	17	-	0.0%	0.0%
29	North Carolina	-	5	11	-	-	-	-	5	11	-	0.0%	0.0%
30	Arizona	-	-	-	w	5	7	w	5	7	-	0.0%	0.0%
31	Idaho	-	2	4	-	-	-	-	2	4	-	0.0%	0.0%
31	Georgia	-	1	2	-	1	2	-	2	4	-	0.0%	0.0%
33	Mississippi	-	-	-	w	-	-	w	-	-	-	-	-
U.S. Total		5,339	151,007	335,468	12,783	116,305	158,982	18,122	267,312	494,450			

w = Withheld to avoid disclosure of individual company data

Source: [EIA, Annual Coal Report, 2004](#)

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.

Table 2.2 Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2003
Million Short Tons

Rank (by demonstrated reserve base)	State	Underground			Surface			Total			Percent of Total		
		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	w	35,923	70,958	w	39,107	48,372	1,197	75,030	119,330	6.7%	28.0%	24.1%
2	Illinois	873	27,961	88,025	40	10,079	16,563	913	38,040	104,589	5.1%	14.2%	21.1%
3	Wyoming	-	22,950	42,501	6,707	19,282	22,320	6,707	42,232	64,821	37.4%	15.7%	13.1%
4	West Virginia	1,153	15,770	29,548	343	2,476	3,925	1,497	18,246	33,473	8.3%	6.8%	6.7%
5	Kentucky	796	7,563	17,346	198	7,546	13,076	994	15,109	30,422	5.5%	5.6%	6.1%
6	Pennsylvania	439	10,825	23,437	97	1,065	4,283	536	11,889	27,719	3.0%	4.4%	5.6%
7	Ohio	202	7,746	17,606	134	3,781	5,777	336	11,527	23,382	1.9%	4.3%	4.7%
8	Colorado	360	6,087	11,599	67	3,750	4,766	427	9,837	16,365	2.4%	3.7%	3.3%
9	Texas	-	-	-	623	9,622	12,500	623	9,622	12,500	3.5%	3.6%	2.5%
10	New Mexico	w	2,855	6,187	w	4,103	6,025	1,351	6,958	12,212	7.5%	2.6%	2.5%
11	Indiana	262	3,638	8,784	170	469	802	432	4,107	9,586	2.4%	1.5%	1.9%
12	North Dakota	-	-	-	1,211	6,963	9,128	1,211	6,963	9,128	6.7%	2.6%	1.8%
13	Alaska	-	2,745	5,423	w	547	691	w	3,292	6,114	-	1.2%	1.2%
14	Missouri	-	689	1,479	w	3,158	4,512	w	3,848	5,991	-	1.4%	1.2%
15	Utah	w	2,559	5,221	w	212	268	331	2,771	5,488	1.8%	1.0%	1.1%
16	Alabama	283	537	1,066	25	2,290	3,215	308	2,828	4,282	1.7%	1.1%	0.9%
17	Iowa	-	807	1,732	-	320	457	-	11,027	2,189	-	4.1%	0.4%
18	Virginia	192	676	1,204	34	378	590	226	1,054	1,794	1.3%	0.4%	0.4%
19	Oklahoma	w	574	1,233	w	229	327	17	803	1,559	0.1%	0.3%	0.3%
20	Washington	-	674	1,332	w	12	16	w	687	1,348	-	0.3%	0.3%
21	Kansas	-	-	-	-	681	973	-	681	973	-	0.3%	0.2%
22	Tennessee	4	282	515	18	182	269	22	464	783	0.1%	0.2%	0.2%
23	Maryland	w	324	591	w	47	70	61	371	661	0.3%	0.1%	0.1%
24	Louisiana	-	-	-	w	320	431	w	320	431	-	0.1%	0.1%
25	Arkansas	-	127	272	-	101	144	-	228	417	-	0.1%	0.1%
26	South Dakota	-	-	-	-	277	366	-	277	366	-	0.1%	0.1%
27	Michigan	-	55	123	-	3	5	-	59	128	-	0.0%	0.0%
28	Arizona	-	-	-	w	18	23	w	18	23	-	0.0%	0.0%
29	North Carolina	-	5	11	-	-	-	-	5	11	-	0.0%	0.0%
30	Idaho	-	2	4	-	-	-	-	2	4	-	0.0%	0.0%
30	Georgia	-	1	2	-	1	2	-	2	4	-	0.0%	0.0%
32	Mississippi	-	-	-	w	-	-	w	-	-	-	-	-
	U.S. Total	5,225	151,376	336,199	12,730	117,019	159,893	17,955	268,396	496,092			

w = Withheld to avoid disclosure of individual company data

Source: [EIA, Annual Coal Report, 2003](#)

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.

Table 2.2 Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2002
Million Short Tons

Rank (by demonstrated reserve base)	State	Underground			Surface			Total			Percent of Total		
		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	-	35,923	70,958	1,115	39,145	48,418	1,115	75,067	119,377	6.1%	27.9%	24.0%
2	Illinois	873	27,978	88,077	27	10,083	16,570	900	38,061	104,648	4.9%	14.1%	21.0%
3	Wyoming	-	22,950	42,501	6,673	19,688	22,790	6,673	42,638	65,291	36.6%	15.8%	13.1%
4	West Virginia	1,074	15,863	29,722	359	2,518	3,991	1,433	18,381	33,713	7.9%	6.8%	6.8%
5	Kentucky	812	7,636	17,484	198	7,577	13,130	1,010	15,213	30,614	5.5%	5.6%	6.2%
6	Pennsylvania	468	10,880	23,541	108	1,074	4,297	576	11,954	27,838	3.2%	4.4%	5.6%
7	Ohio	214	7,757	17,631	141	3,789	5,788	356	11,546	23,419	2.0%	4.3%	4.7%
8	Colorado	429	6,120	11,661	199	3,752	4,769	629	9,872	16,430	3.5%	3.7%	3.3%
9	Texas	-	-	-	673	9,668	12,559	673	9,668	12,559	3.7%	3.6%	2.5%
10	New Mexico	w	2,860	6,199	w	4,121	6,051	1,385	6,981	12,249	7.6%	2.6%	2.5%
11	Indiana	223	3,645	8,801	158	488	835	381	4,134	9,637	2.1%	1.5%	1.9%
12	North Dakota	-	-	-	1,211	6,993	9,166	1,211	6,993	9,166	6.6%	2.6%	1.8%
13	Alaska	-	2,745	5,423	w	548	692	w	3,293	6,115	-	1.2%	1.2%
14	Missouri	-	689	1,479	w	3,159	4,512	w	3,848	5,991	-	1.4%	1.2%
15	Utah	w	2,582	5,267	w	212	268	356	2,794	5,534	2.0%	1.0%	1.1%
16	Alabama	344	553	1,097	21	2,295	3,221	366	2,848	4,318	2.0%	1.1%	0.9%
17	Iowa	-	807	1,732	-	320	457	-	1,127	2,189	-	0.4%	0.4%
18	Virginia	220	700	1,247	41	386	603	261	1,086	1,850	1.4%	0.4%	0.4%
19	Oklahoma	w	575	1,233	w	230	328	18	804	1,562	0.1%	0.3%	0.3%
20	Washington	-	674	1,332	w	18	23	w	693	1,356	-	0.3%	0.3%
21	Kansas	-	-	-	w	681	973	w	681	973	-	0.3%	0.2%
22	Tennessee	5	283	516	10	184	271	16	467	787	0.1%	0.2%	0.2%
23	Maryland	w	327	597	w	49	72	65	376	669	0.4%	0.1%	0.1%
24	Louisiana	-	-	-	w	323	437	w	323	437	-	0.1%	0.1%
25	Arkansas	-	127	272	w	101	144	w	228	417	-	0.1%	0.1%
26	South Dakota	-	-	-	-	277	366	-	277	366	-	0.1%	0.1%
27	Michigan	-	55	123	-	3	5	-	59	128	-	0.0%	0.0%
28	Arizona	-	-	-	w	30	38	w	30	38	-	0.0%	0.0%
29	Oregon	-	7	15	-	2	3	-	9	17	-	0.0%	0.0%
30	North Carolina	-	5	11	-	-	-	-	5	11	-	0.0%	0.0%
31	Idaho	-	2	4	-	-	-	-	2	4	-	0.0%	0.0%
31	Georgia	-	1	2	-	1	2	-	2	4	-	0.0%	0.0%
	U.S. Total	5,231	151,744	336,928	12,985	117,713	160,780	18,216	269,457	497,708			

w = Withheld to avoid disclosure of individual company data

Source: [EIA, Annual Coal Report, 2002](#)

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.

Table 2.2 Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2001
Million Short Tons

Rank (by demonstrated reserve base)	State	Underground			Surface			Total			Percent of Total		
		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	-	35,923	70,958	1,155	39,182	48,465	1,155	75,105	119,423	6.5%	27.8%	23.9%
2	Illinois	787	27,995	88,131	32	10,088	16,578	819	38,083	104,710	4.6%	14.1%	21.0%
3	Wyoming	-	22,950	42,501	6,100	20,091	23,257	6,100	43,041	65,758	34.3%	15.9%	13.2%
4	West Virginia	1,158	15,956	29,898	343	2,567	4,069	1,502	18,523	33,966	8.4%	6.8%	6.8%
5	Kentucky	812	7,715	17,635	275	7,611	13,191	1,087	15,326	30,826	6.1%	5.7%	6.2%
6	Pennsylvania	456	10,940	23,652	101	1,084	4,312	558	12,024	27,965	3.1%	4.4%	5.6%
7	Ohio	242	7,767	17,653	208	3,797	5,801	450	11,564	23,454	2.5%	4.3%	4.7%
8	Colorado	353	6,151	11,721	209	3,754	4,771	562	9,905	16,493	3.2%	3.7%	3.3%
9	Texas	-	-	-	724	9,711	12,616	724	9,711	12,616	4.1%	3.6%	2.5%
10	New Mexico	w	2,862	6,202	w	4,144	6,085	1,404	7,006	12,287	7.9%	2.6%	2.5%
11	Indiana	235	3,652	8,817	162	509	870	397	4,161	9,687	2.2%	1.5%	1.9%
12	North Dakota	-	-	-	1,151	7,022	9,205	1,151	7,022	9,205	6.5%	2.6%	1.8%
13	Alaska	-	2,745	5,423	w	549	694	w	3,294	6,117	-	1.2%	1.2%
14	Missouri	-	689	1,479	w	3,159	4,512	w	3,848	5,992	-	1.4%	1.2%
15	Utah	364	2,607	5,317	-	212	268	364	2,819	5,585	2.0%	1.0%	1.1%
16	Alabama	327	568	1,127	24	2,298	3,226	352	2,866	4,353	2.0%	1.1%	0.9%
17	Iowa	-	807	1,732	-	320	457	-	1,127	2,189	-	0.4%	0.4%
18	Virginia	206	723	1,288	34	394	615	240	1,117	1,902	1.3%	0.4%	0.4%
19	Oklahoma	w	575	1,234	w	231	329	19	806	1,564	0.1%	0.3%	0.3%
20	Washington	-	674	1,332	w	24	31	w	698	1,363	-	0.3%	0.3%
21	Kansas	-	-	-	w	681	973	w	681	973	-	0.3%	0.2%
22	Tennessee	10	284	518	14	186	274	24	470	792	0.1%	0.2%	0.2%
23	Maryland	w	331	604	w	50	74	72	381	678	0.4%	0.1%	0.1%
24	Louisiana	-	-	-	w	327	441	w	327	441	-	0.1%	0.1%
25	Arkansas	-	127	272	-	101	144	-	228	417	-	0.1%	0.1%
26	South Dakota	-	-	-	-	277	366	-	277	366	-	0.1%	0.1%
27	Michigan	-	55	123	-	3	5	-	58	128	-	0.0%	0.0%
28	Arizona	-	51	102	w	-	-	w	51	102	-	0.0%	0.0%
29	Oregon	-	7	15	-	2	3	-	9	18	-	0.0%	0.0%
30	North Carolina	-	5	11	-	-	-	-	5	11	-	0.0%	0.0%
31	Idaho	-	2	4	-	-	-	-	2	4	-	0.0%	0.0%
31	Georgia	-	1	2	-	1	2	-	2	4	-	0.0%	0.0%
U.S. Total		5,172	152,162	337,751	12,629	118,375	161,634	17,801	270,537	499,389			

w = Withheld to avoid disclosure of individual company data

Source: [EIA, Annual Coal Report, 2001](#)

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.