

**Table 43. Average quality of coal received at manufacturing and coke plants by census division and state**

Census division and state <sup>1</sup>	October - December 2018	July - September 2018	October - December 2017	Year to date		Percent change
				2018	2017	
<b>New England</b>						
Btu	12,658	12,705	12,661	12,682	12,619	0.5
Sulfur	0.76	0.75	0.83	0.77	0.81	-4.1
Ash	7.18	7.27	7.96	7.59	8.15	-6.9
<b>Maine</b>						
Btu	12,773	12,773	12,714	12,748	12,684	0.5
Sulfur	0.73	0.73	0.67	0.75	0.71	5.5
Ash	7.39	7.39	7.11	7.29	7.48	-2.5
<b>Massachusetts</b>						
Btu	12,189	12,267	12,479	12,290	12,358	-0.5
Sulfur	0.90	0.89	1.37	0.94	1.21	-22.0
Ash	6.32	6.53	10.84	9.33	10.81	-13.7
<b>Middle Atlantic</b>						
Btu	14,079	14,095	13,996	14,080	13,873	1.5
Sulfur	1.09	1.07	1.13	1.10	1.14	-2.8
Ash	7.44	7.48	8.07	7.68	8.52	-9.8
<b>New York</b>						
Btu	13,072	13,425	13,345	13,371	13,402	-0.2
Sulfur	1.89	1.68	1.65	1.77	1.64	7.5
Ash	7.93	7.62	6.95	7.75	7.13	8.6
<b>Pennsylvania</b>						
Btu	14,118	14,125	14,038	14,123	13,906	1.6
Sulfur	1.06	1.04	1.10	1.06	1.10	-3.4
Ash	7.42	7.48	8.15	7.68	8.61	-10.8
<b>East North Central</b>						
Btu	13,126	13,284	13,337	13,184	13,221	-0.3
Sulfur	1.16	1.14	1.24	1.16	1.39	-16.2
Ash	7.52	7.29	7.31	7.33	7.12	2.9
<b>Illinois</b>						
Btu	11,382	11,522	11,758	11,390	11,507	-1.0
Sulfur	2.27	2.20	2.42	2.14	2.21	-3.3
Ash	7.49	7.54	7.66	7.47	7.57	-1.3
<b>Indiana</b>						
Btu	13,784	14,067	13,887	13,973	13,950	0.2
Sulfur	0.83	0.83	0.89	0.84	0.88	-4.1
Ash	7.39	7.11	7.27	7.21	7.37	-2.2
<b>Michigan</b>						
Btu	13,139	13,127	14,123	13,150	13,556	-3.0
Sulfur	0.80	0.74	0.78	0.84	2.44	-65.4
Ash	7.75	7.21	7.11	7.40	5.42	36.6
<b>Ohio</b>						
Btu	14,190	14,198	14,076	14,167	14,090	0.5
Sulfur	1.04	1.00	1.01	1.01	1.00	1.4
Ash	7.60	7.43	7.25	7.37	7.28	1.3
<b>Wisconsin</b>						
Btu	10,983	10,833	10,770	10,879	10,792	0.8
Sulfur	0.79	0.81	0.94	0.83	0.82	1.2
Ash	7.55	7.18	6.90	7.16	6.78	5.6
<b>West North Central</b>						
Btu	8,213	8,281	8,255	8,229	8,306	-0.9
Sulfur	0.73	0.85	0.78	0.81	0.86	-6.4
Ash	6.23	6.36	6.20	6.29	6.30	-0.1
<b>Iowa</b>						
Btu	9,016	9,271	9,154	9,153	9,253	-1.1
Sulfur	0.57	0.94	0.76	0.78	0.86	-8.8
Ash	4.93	5.35	5.18	5.15	5.52	-6.8
<b>Kansas</b>						

Census division and state¹	October - December 2018	July - September 2018	October - December 2017	Year to date		Percent change
				2018	2017	
Btu	10,494	10,861	10,954	10,792	10,908	-1.1
Sulfur	1.93	1.83	1.83	2.04	1.76	15.9
Ash	13.28	12.07	10.59	12.77	10.30	23.9
<b>Minnesota</b>						
Btu	9,133	9,105	9,097	9,113	9,130	-0.2
Sulfur	0.31	0.30	0.30	0.30	0.31	-2.4
Ash	4.50	4.64	4.53	4.52	4.58	-1.4
<b>Missouri</b>						
Btu	11,137	11,148	11,549	11,225	11,290	-0.6
Sulfur	2.31	2.39	2.29	2.34	2.29	2.2
Ash	8.78	8.72	8.87	8.72	8.91	-2.2
<b>Nebraska</b>						
Btu	8,867	9,097	8,861	8,932	8,962	-0.3
Sulfur	0.23	0.25	0.23	0.24	0.24	-0.3
Ash	4.75	4.93	4.93	4.80	4.83	-0.6
<b>North Dakota</b>						
Btu	7,259	7,191	7,256	7,204	7,231	-0.4
Sulfur	0.73	0.76	0.81	0.78	0.88	-11.0
Ash	6.80	6.81	6.73	6.81	6.73	1.3
<b>South Dakota</b>						
Btu	8,334	8,399	8,313	8,357	8,375	-0.2
Sulfur	0.52	0.55	0.57	0.56	0.59	-4.6
Ash	5.96	6.12	6.67	6.33	6.65	-4.8
<b>South Atlantic</b>						
Btu	13,178	13,359	13,332	13,345	13,361	-0.1
Sulfur	1.14	1.12	1.19	1.11	1.17	-4.9
Ash	10.12	9.74	9.59	9.75	9.63	1.2
<b>Florida</b>						
Btu	12,402	12,648	12,471	12,575	12,604	-0.2
Sulfur	1.13	0.93	1.13	1.01	1.32	-23.2
Ash	9.58	10.58	8.90	10.23	9.05	13.1
<b>Georgia</b>						
Btu	12,532	12,329	12,803	12,546	12,498	0.4
Sulfur	1.01	1.06	1.02	0.97	0.99	-2.1
Ash	9.98	11.50	8.79	9.97	10.27	-2.9
<b>Maryland</b>						
Btu	10,811	11,133	10,927	11,035	10,929	1.0
Sulfur	1.85	1.69	1.86	1.80	1.85	-2.5
Ash	24.34	23.71	24.13	23.51	23.47	0.2
<b>North Carolina</b>						
Btu	13,508	13,633	13,607	13,532	13,646	-0.8
Sulfur	0.93	0.97	0.94	0.93	0.95	-2.4
Ash	7.11	7.05	7.03	7.40	6.98	6.1
<b>South Carolina</b>						
Btu	13,317	13,042	13,206	13,315	13,433	-0.9
Sulfur	1.75	1.49	1.53	1.65	1.34	22.5
Ash	8.68	10.55	7.65	8.44	9.33	-9.6
<b>Virginia</b>						
Btu	14,047	14,133	14,142	14,118	14,160	-0.3
Sulfur	0.83	0.84	0.86	0.85	0.87	-2.3
Ash	7.29	7.11	7.13	7.31	7.10	2.9
<b>West Virginia</b>						
Btu	13,939	14,001	14,089	14,029	14,116	-0.6
Sulfur	1.16	1.32	1.39	1.24	1.29	-3.9
Ash	6.86	6.71	6.99	6.86	6.99	-1.9
<b>East South Central</b>						
Btu	13,378	13,388	13,578	13,401	13,541	-1.0
Sulfur	1.23	1.20	1.08	1.21	1.17	3.1
Ash	7.26	7.46	7.54	7.35	7.30	0.7
<b>Alabama</b>						
Btu	13,708	13,838	13,881	13,802	13,887	-0.6

Census division and state¹	October - December 2018	July - September 2018	October - December 2017	Year to date		Percent change
				2018	2017	
Sulfur	1.03	0.99	1.11	1.04	1.07	-2.4
Ash	6.90	6.87	7.31	6.93	7.21	-3.8
<b>Kentucky</b>						
Btu	13,051	12,779	13,451	12,949	13,255	-2.3
Sulfur	1.10	1.02	1.09	1.07	1.03	4.0
Ash	8.43	8.66	7.73	8.08	7.61	6.2
<b>Tennessee</b>						
Btu	13,049	12,989	13,090	13,028	13,198	-1.3
Sulfur	1.66	1.63	1.01	1.54	1.41	9.9
Ash	7.06	7.79	7.86	7.61	7.27	4.6
<b>West South Central</b>						
Btu	10,019	10,146	9,929	9,910	9,677	2.4
Sulfur	0.65	0.67	0.57	0.62	0.57	9.6
Ash	8.28	8.58	8.61	8.35	8.19	2.0
<b>Arkansas</b>						
Btu	11,745	11,773	11,529	11,633	11,846	-1.8
Sulfur	1.20	1.29	1.31	1.20	1.27	-5.7
Ash	10.29	10.33	12.09	10.50	10.69	-1.8
<b>Louisiana</b>						
Btu	8,172	8,117	8,214	8,083	7,855	2.9
Sulfur	0.78	0.70	0.64	0.74	0.67	10.7
Ash	6.16	6.46	6.87	6.34	6.81	-6.8
<b>Oklahoma</b>						
Btu	9,991	10,750	9,642	9,868	9,332	5.7
Sulfur	0.32	0.46	0.31	0.33	0.28	16.1
Ash	4.98	6.19	5.43	5.31	4.86	9.2
<b>Texas</b>						
Btu	10,165	10,270	10,274	10,148	9,936	2.1
Sulfur	0.55	0.56	0.51	0.55	0.52	5.4
Ash	9.82	9.87	10.29	10.23	10.29	-0.5
<b>Mountain</b>						
Btu	10,411	10,522	10,339	10,502	10,384	1.1
Sulfur	0.59	0.61	0.58	0.60	0.53	14.3
Ash	6.96	7.20	7.16	7.08	7.22	-2.0
<b>Arizona</b>						
Btu	11,582	11,720	11,714	11,654	11,642	0.1
Sulfur	0.66	0.70	0.60	0.68	0.61	12.1
Ash	12.19	11.50	11.36	11.54	11.31	2.0
<b>Colorado</b>						
Btu	10,674	11,144	10,721	10,730	10,855	-1.2
Sulfur	0.59	0.47	0.50	0.50	0.49	1.2
Ash	8.08	8.14	8.62	8.09	8.26	-2.0
<b>Idaho</b>						
Btu	11,898	11,630	11,914	11,593	11,454	1.2
Sulfur	0.51	0.48	0.57	0.49	0.53	-8.1
Ash	9.99	9.90	9.94	10.01	10.87	-7.9
<b>Montana</b>						
Btu	8,664	9,174	8,634	9,109	8,991	1.3
Sulfur	0.36	0.40	0.33	0.38	0.36	5.3
Ash	5.77	5.22	5.53	5.73	5.46	4.9
<b>Nevada</b>						
Btu	11,594	11,475	11,497	11,596	11,225	3.3
Sulfur	0.43	0.40	0.52	0.43	0.50	-14.1
Ash	9.92	9.55	8.97	9.32	8.78	6.1
<b>New Mexico</b>						
Btu	12,255	12,253	12,277	12,230	12,261	-0.2
Sulfur	0.95	0.64	0.74	0.78	0.71	10.8
Ash	10.41	10.43	10.83	10.62	10.43	1.8
<b>Utah</b>						
Btu	11,410	11,581	11,432	11,513	11,462	0.4
Sulfur	0.46	0.45	0.53	0.46	0.54	-14.0

Census division and state <sup>1</sup>	October - December 2018	July - September 2018	October - December 2017	Year to date		Percent change
				2018	2017	
Ash	10.62	10.22	10.81	10.53	11.24	-6.3
<b>Wyoming</b>						
Btu	9,935	9,828	9,847	9,894	9,776	1.2
Sulfur	0.69	0.70	0.67	0.70	0.54	28.7
Ash	4.42	5.11	5.15	4.80	5.02	-4.5
<b>Pacific</b>						
Btu	11,242	11,568	11,417	11,462	11,392	0.6
Sulfur	0.42	0.41	0.58	0.45	0.58	-22.1
Ash	10.95	10.28	11.13	10.44	11.22	-7.0
<b>California</b>						
Btu	11,370	11,638	11,501	11,560	11,497	0.5
Sulfur	0.43	0.41	0.60	0.45	0.59	-23.2
Ash	11.39	10.48	11.51	10.77	11.62	-7.3
<b>Oregon</b>						
Btu	11,459	11,837	11,795	11,687	11,650	0.3
Sulfur	0.38	0.36	0.53	0.45	0.53	-16.0
Ash	11.47	9.30	9.80	10.09	10.07	0.2
<b>Washington</b>						
Btu	9,329	9,275	9,328	9,395	9,386	0.1
Sulfur	0.36	0.34	0.33	0.35	0.33	4.8
Ash	4.41	4.53	4.70	4.19	4.45	-5.9
<b>U.S. Total</b>						
Btu	11,730	11,930	11,772	11,821	11,774	0.4
Sulfur	0.98	1.00	1.00	1.00	1.08	-7.7
Ash	7.48	7.46	7.52	7.45	7.51	-0.7

<sup>1</sup> Quality units are Btu (per pound); sulfur (percent by weight); and ash (percent by weight).

- = No data reported.

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'