

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

Census division and state <sup>1</sup>	January - March 2023	October - December 2022	January - March 2022	Year to date		Percent change
				2023	2022	
<b>Middle Atlantic</b>						
Btu	14,195	14,238	14,209	14,195	14,209	-0.1
Sulfur	1.14	1.11	1.09	1.14	1.09	4.8
Ash	7.32	7.32	7.32	7.32	7.32	0.1
<b>New York</b>						
Btu	12,716	12,679	12,716	12,716	12,716	s
Sulfur	2.26	2.20	2.26	2.26	2.26	s
Ash	9.30	9.57	9.53	9.30	9.53	-2.4
<b>Pennsylvania</b>						
Btu	14,277	14,317	14,234	14,277	14,234	0.3
Sulfur	1.07	1.05	1.07	1.07	1.07	0.8
Ash	7.21	7.21	7.28	7.21	7.28	-1.0
<b>East North Central</b>						
Btu	13,568	13,469	13,467	13,568	13,467	0.7
Sulfur	1.10	1.16	1.28	1.10	1.28	-14.3
Ash	7.10	7.42	7.49	7.10	7.49	-5.3
<b>Illinois</b>						
Btu	11,710	11,977	12,040	11,710	12,040	-2.7
Sulfur	1.79	2.14	2.47	1.79	2.47	-27.7
Ash	7.03	7.43	7.63	7.03	7.63	-8.0
<b>Indiana</b>						
Btu	14,199	13,858	14,176	14,199	14,176	0.2
Sulfur	0.91	0.96	0.88	0.91	0.88	4.2
Ash	6.82	7.36	7.49	6.82	7.49	-9.0
<b>Michigan</b>						
Btu	13,835	14,014	12,847	13,835	12,847	7.7
Sulfur	0.71	0.72	0.76	0.71	0.76	-6.7
Ash	7.30	7.45	7.90	7.30	7.90	-7.6
<b>Ohio</b>						
Btu	14,218	14,195	14,208	14,218	14,208	0.1
Sulfur	1.02	1.05	1.01	1.02	1.01	0.6
Ash	7.44	7.59	7.36	7.44	7.36	1.0
<b>Wisconsin</b>						
Btu	10,350	11,040	10,763	10,350	10,763	-3.8
Sulfur	0.55	0.61	0.98	0.55	0.98	-44.0
Ash	7.65	6.62	6.96	7.65	6.96	9.9
<b>West North Central</b>						
Btu	8,390	8,380	8,130	8,390	8,130	3.2
Sulfur	0.66	0.79	0.75	0.66	0.75	-11.9
Ash	5.74	6.48	6.33	5.74	6.33	-9.4
<b>Iowa</b>						
Btu	8,868	9,122	8,877	8,868	8,877	-0.1
Sulfur	0.40	0.69	0.39	0.40	0.39	3.5
Ash	5.14	5.58	4.85	5.14	4.85	6.2
<b>Kansas</b>						
Btu	10,884	11,083	10,470	10,884	10,470	4.0
Sulfur	2.32	2.15	2.09	2.32	2.09	11.1
Ash	11.69	10.85	13.18	11.69	13.18	-11.3
<b>Minnesota</b>						
Btu	9,293	9,312	9,344	9,293	9,344	-0.5
Sulfur	0.34	0.35	0.36	0.34	0.36	-6.1
Ash	4.24	4.25	4.21	4.24	4.21	0.8
<b>Missouri</b>						
Btu	11,149	11,216	11,173	11,149	11,173	-0.2
Sulfur	1.58	2.19	2.10	1.58	2.10	-24.6
Ash	8.91	8.67	8.67	8.91	8.67	2.7
<b>Nebraska</b>						

Census division and state¹	January - March 2023	October - December 2022	January - March 2022	Year to date		Percent change
				2023	2022	
Btu	8,812	8,845	8,743	8,812	8,743	0.8
Sulfur	0.30	0.29	0.22	0.30	0.22	36.1
Ash	5.01	5.04	4.55	5.01	4.55	10.1
<b>North Dakota</b>						
Btu	7,455	7,321	7,186	7,455	7,186	3.7
Sulfur	0.75	0.77	0.87	0.75	0.87	-14.0
Ash	5.89	7.16	7.17	5.89	7.17	-17.9
<b>South Dakota</b>						
Btu	8,014	8,008	8,019	8,014	8,019	-0.1
Sulfur	0.35	0.34	0.35	0.35	0.35	-1.0
Ash	5.31	4.52	5.07	5.31	5.07	4.7
<b>South Atlantic</b>						
Btu	13,280	13,033	13,430	13,280	13,430	-1.1
Sulfur	1.16	1.20	1.10	1.16	1.10	5.1
Ash	9.88	10.68	9.02	9.88	9.02	9.5
<b>Florida</b>						
Btu	11,709	11,255	12,274	11,709	12,274	-4.6
Sulfur	2.02	2.37	2.47	2.02	2.47	-18.3
Ash	9.23	10.15	10.44	9.23	10.44	-11.6
<b>Georgia</b>						
Btu	12,329	12,670	12,399	12,329	12,399	-0.6
Sulfur	1.17	0.93	0.96	1.17	0.96	22.7
Ash	11.76	7.98	10.64	11.76	10.64	10.5
<b>Maryland</b>						
Btu	11,187	11,177	11,903	11,187	11,903	-6.0
Sulfur	1.75	1.48	1.34	1.75	1.34	31.1
Ash	25.04	21.76	18.69	25.04	18.69	34.0
<b>North Carolina</b>						
Btu	13,539	13,384	13,568	13,539	13,568	-0.2
Sulfur	0.90	1.25	0.92	0.90	0.92	-2.7
Ash	7.93	8.19	7.74	7.93	7.74	2.5
<b>South Carolina</b>						
Btu	13,137	13,001	12,691	13,137	12,691	3.5
Sulfur	1.20	1.34	1.73	1.20	1.73	-30.8
Ash	8.32	9.89	8.72	8.32	8.72	-4.6
<b>Virginia</b>						
Btu	13,991	13,986	14,007	13,991	14,007	-0.1
Sulfur	1.01	0.98	0.84	1.01	0.84	20.4
Ash	7.49	7.61	7.43	7.49	7.43	0.7
<b>West Virginia</b>						
Btu	13,412	12,942	13,865	13,412	13,865	-3.3
Sulfur	1.17	1.14	1.21	1.17	1.21	-3.3
Ash	7.76	10.44	7.37	7.76	7.37	5.3
<b>East South Central</b>						
Btu	13,296	13,391	13,152	13,296	13,152	1.1
Sulfur	1.21	1.31	1.36	1.21	1.36	-11.0
Ash	7.42	7.46	7.79	7.42	7.79	-4.8
<b>Alabama</b>						
Btu	13,801	13,857	13,533	13,801	13,533	2.0
Sulfur	1.12	1.06	1.18	1.12	1.18	-5.6
Ash	7.16	8.06	8.41	7.16	8.41	-14.8
<b>Kentucky</b>						
Btu	12,849	13,323	12,658	12,849	12,658	1.5
Sulfur	1.06	1.46	1.33	1.06	1.33	-20.2
Ash	7.43	7.16	7.86	7.43	7.86	-5.4
<b>Mississippi</b>						
Btu	14,720	14,763	14,677	14,720	14,677	0.3
Sulfur	0.80	0.81	0.73	0.80	0.73	10.3
Ash	3.47	3.40	3.80	3.47	3.80	-8.5
<b>Tennessee</b>						
Btu	13,038	12,912	12,958	13,038	12,958	0.6

Census division and state¹	January - March 2023	October - December 2022	January - March 2022	Year to date		Percent change
				2023	2022	
Sulfur	1.42	1.48	1.63	1.42	1.63	-13.3
Ash	7.90	7.31	7.21	7.90	7.21	9.7
<b>West South Central</b>						
Btu	10,105	9,932	9,942	10,105	9,942	1.6
Sulfur	0.67	0.70	0.60	0.67	0.60	11.6
Ash	8.18	8.46	7.63	8.18	7.63	7.2
<b>Arkansas</b>						
Btu	11,783	11,201	11,358	11,783	11,358	3.7
Sulfur	1.29	1.43	1.03	1.29	1.03	25.4
Ash	9.54	10.27	8.85	9.54	8.85	7.7
<b>Louisiana</b>						
Btu	7,489	7,489	7,489	7,489	7,489	s
Sulfur	0.50	0.58	0.55	0.50	0.55	-9.1
Ash	6.65	6.42	7.68	6.65	7.68	-13.4
<b>Oklahoma</b>						
Btu	10,530	10,826	10,239	10,530	10,239	2.8
Sulfur	0.55	0.56	0.56	0.55	0.56	-2.5
Ash	7.34	6.30	6.83	7.34	6.83	7.6
<b>Texas</b>						
Btu	11,456	11,584	11,633	11,456	11,633	-1.5
Sulfur	0.60	0.57	0.50	0.60	0.50	20.2
Ash	9.99	11.15	7.94	9.99	7.94	25.8
<b>Mountain</b>						
Btu	10,570	10,321	10,614	10,570	10,614	-0.4
Sulfur	0.52	0.53	0.46	0.52	0.46	12.9
Ash	6.62	6.39	6.63	6.62	6.63	-0.2
<b>Arizona</b>						
Btu	11,129	11,331	11,744	11,129	11,744	-5.2
Sulfur	0.60	0.65	0.63	0.60	0.63	-5.3
Ash	9.52	10.00	8.61	9.52	8.61	10.6
<b>Colorado</b>						
Btu	11,716	11,653	11,870	11,716	11,870	-1.3
Sulfur	0.52	0.71	0.55	0.52	0.55	-6.0
Ash	9.82	8.87	8.10	9.82	8.10	21.3
<b>Idaho</b>						
Btu	11,280	12,168	12,849	11,280	12,849	-12.2
Sulfur	0.46	0.52	0.53	0.46	0.53	-12.6
Ash	10.56	9.66	8.20	10.56	8.20	28.7
<b>Montana</b>						
Btu	9,546	8,554	8,831	9,546	8,831	8.1
Sulfur	0.35	0.35	0.29	0.35	0.29	19.9
Ash	5.17	5.01	5.01	5.17	5.01	3.2
<b>Nevada</b>						
Btu	11,457	11,597	11,603	11,457	11,603	-1.3
Sulfur	0.47	0.48	0.44	0.47	0.44	5.4
Ash	9.42	10.03	10.49	9.42	10.49	-10.2
<b>New Mexico</b>						
Btu	11,973	11,928	12,361	11,973	12,361	-3.1
Sulfur	0.74	0.83	0.65	0.74	0.65	13.8
Ash	12.48	12.38	9.45	12.48	9.45	32.1
<b>Utah</b>						
Btu	11,376	11,379	11,718	11,376	11,718	-2.9
Sulfur	0.46	0.45	0.45	0.46	0.45	1.6
Ash	9.78	9.19	11.06	9.78	11.06	-11.5
<b>Wyoming</b>						
Btu	10,083	9,809	9,989	10,083	9,989	0.9
Sulfur	0.55	0.54	0.45	0.55	0.45	23.7
Ash	4.35	4.08	4.46	4.35	4.46	-2.5
<b>Pacific</b>						
Btu	11,169	11,125	11,339	11,169	11,339	-1.5
Sulfur	0.44	0.45	0.38	0.44	0.38	13.9

Census division and state <sup>1</sup>	January - March 2023	October - December 2022	January - March 2022	Year to date		Percent change
				2023	2022	
Ash	8.10	8.35	8.40	8.10	8.40	-3.6
<b>California</b>						
Btu	11,298	11,206	11,449	11,298	11,449	-1.3
Sulfur	0.45	0.46	0.39	0.45	0.39	15.2
Ash	8.34	8.43	8.56	8.34	8.56	-2.5
<b>Oregon</b>						
Btu	12,237	10,864	11,463	12,237	11,463	6.8
Sulfur	0.35	0.32	0.33	0.35	0.33	6.1
Ash	8.09	10.45	10.37	8.09	10.37	-22.0
<b>Washington</b>						
Btu	9,317	9,340	9,436	9,317	9,436	-1.3
Sulfur	0.30	0.33	0.36	0.30	0.36	-16.7
Ash	4.67	5.01	4.42	4.67	4.42	5.7
<b>U.S. Total</b>						
Btu	11,845	11,872	11,711	11,845	11,711	1.1
Sulfur	0.93	1.00	0.99	0.93	0.99	-6.7
Ash	6.98	7.37	7.26	6.98	7.26	-3.8

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

- = No data reported.

s = Absolute percentage less than 0.05.

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.'