

**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 2023	July - September 2023	October - December 2022	Year to date		Percent change
				2023	2022	
<b>Middle Atlantic</b>						
Btu	14,191	14,175	14,238	14,185	14,180	s
Sulfur	1.09	1.09	1.11	1.11	1.13	-1.7
Ash	7.08	7.17	7.32	7.22	7.34	-1.6
<b>New York</b>						
Btu	12,626	12,663	12,679	12,654	12,723	-0.5
Sulfur	2.21	2.23	2.20	2.23	2.21	0.9
Ash	10.05	9.86	9.57	9.75	9.54	2.2
<b>Pennsylvania</b>						
Btu	14,232	14,221	14,317	14,239	14,245	s
Sulfur	1.06	1.05	1.05	1.07	1.08	-0.9
Ash	7.00	7.09	7.21	7.13	7.24	-1.5
<b>East North Central</b>						
Btu	13,603	13,556	13,469	13,562	13,418	1.1
Sulfur	1.09	1.02	1.16	1.07	1.21	-12.0
Ash	7.23	6.94	7.42	7.06	7.46	-5.3
<b>Illinois</b>						
Btu	11,480	11,481	11,977	11,499	12,008	-4.2
Sulfur	1.87	1.35	2.14	1.65	2.30	-28.4
Ash	7.13	6.49	7.43	6.78	7.47	-9.2
<b>Indiana</b>						
Btu	14,249	14,171	13,858	14,228	13,902	2.3
Sulfur	0.95	0.90	0.96	0.91	0.91	0.1
Ash	7.13	6.83	7.36	6.94	7.40	-6.1
<b>Michigan</b>						
Btu	13,877	13,812	14,014	13,843	13,550	2.2
Sulfur	0.81	0.84	0.72	0.81	0.72	13.1
Ash	7.72	7.57	7.45	7.55	7.64	-1.2
<b>Ohio</b>						
Btu	14,257	14,292	14,195	14,255	14,202	0.4
Sulfur	1.04	1.05	1.05	1.04	1.03	1.0
Ash	7.22	7.14	7.59	7.24	7.49	-3.3
<b>Wisconsin</b>						
Btu	11,089	11,502	11,040	10,823	10,942	-1.1
Sulfur	0.55	0.71	0.61	0.56	0.88	-36.5
Ash	6.35	7.03	6.62	6.77	7.06	-4.1
<b>West North Central</b>						
Btu	8,458	8,457	8,380	8,380	8,237	1.7
Sulfur	0.79	0.77	0.79	0.74	0.77	-3.9
Ash	6.07	6.17	6.48	5.97	6.15	-2.9
<b>Iowa</b>						
Btu	9,002	8,911	9,122	8,904	8,968	-0.7
Sulfur	0.64	0.48	0.69	0.47	0.53	-11.6
Ash	5.39	5.16	5.58	5.19	4.98	4.3
<b>Kansas</b>						
Btu	10,871	10,683	11,083	10,940	10,497	4.2
Sulfur	1.56	1.71	2.15	1.81	2.26	-19.7
Ash	10.25	8.74	10.85	10.80	13.66	-21.0
<b>Minnesota</b>						
Btu	9,302	9,232	9,312	9,276	9,306	-0.3
Sulfur	0.30	0.32	0.35	0.33	0.35	-7.0
Ash	4.13	4.28	4.25	4.23	4.26	-0.7
<b>Missouri</b>						
Btu	11,057	11,326	11,216	11,185	11,183	s
Sulfur	2.28	1.90	2.19	2.05	2.12	-3.3
Ash	8.58	8.44	8.67	8.59	8.54	0.5
<b>Nebraska</b>						
Btu	8,807	8,806	8,845	8,811	8,767	0.5

Census division and state¹	October - December 2023	July - September 2023	October - December 2022	Year to date		Percent change
				2023	2022	
Sulfur	0.30	0.30	0.29	0.30	0.23	27.9
Ash	5.01	5.00	5.04	5.01	4.66	7.6
<b>North Dakota</b>						
Btu	7,433	7,380	7,321	7,375	7,228	2.0
Sulfur	0.80	0.82	0.77	0.79	0.82	-3.7
Ash	6.53	6.67	7.16	6.28	6.73	-6.7
<b>South Dakota</b>						
Btu	8,001	7,989	8,008	8,005	8,015	-0.1
Sulfur	0.36	0.37	0.34	0.36	0.35	2.6
Ash	5.30	5.43	4.52	5.34	4.85	10.1
<b>South Atlantic</b>						
Btu	13,449	13,266	13,033	13,301	13,117	1.4
Sulfur	1.10	1.17	1.20	1.15	1.16	-0.8
Ash	9.43	9.85	10.68	9.84	10.43	-5.6
<b>Florida</b>						
Btu	12,739	12,048	11,255	11,795	12,017	-1.8
Sulfur	3.70	1.58	2.37	2.14	2.46	-13.2
Ash	11.12	7.67	10.15	9.09	10.02	-9.2
<b>Georgia</b>						
Btu	12,483	12,368	12,670	12,358	12,488	-1.0
Sulfur	1.11	1.09	0.93	1.12	0.93	21.2
Ash	9.66	10.71	7.98	10.94	10.20	7.2
<b>Maryland</b>						
Btu	11,597	11,509	11,177	11,522	11,096	3.8
Sulfur	1.78	1.74	1.48	1.74	1.38	25.7
Ash	19.00	18.48	21.76	20.08	22.59	-11.1
<b>North Carolina</b>						
Btu	12,855	12,837	13,384	13,297	13,402	-0.8
Sulfur	1.01	0.97	1.25	0.92	1.00	-7.6
Ash	8.72	8.79	8.19	8.10	8.17	-0.8
<b>South Carolina</b>						
Btu	12,872	13,323	13,001	13,175	12,909	2.1
Sulfur	0.77	1.30	1.34	1.19	1.55	-23.3
Ash	9.66	7.89	9.89	8.30	9.13	-9.0
<b>Virginia</b>						
Btu	14,293	14,231	13,986	14,148	14,020	0.9
Sulfur	0.85	0.94	0.98	0.93	0.92	1.0
Ash	6.95	7.04	7.61	7.23	7.35	-1.7
<b>West Virginia</b>						
Btu	13,558	13,300	12,942	13,389	13,362	0.2
Sulfur	1.03	1.12	1.14	1.14	1.26	-9.3
Ash	6.46	8.20	10.44	7.72	8.65	-10.7
<b>East South Central</b>						
Btu	13,263	13,496	13,391	13,344	13,231	0.9
Sulfur	1.33	1.22	1.31	1.25	1.31	-4.3
Ash	7.39	7.11	7.46	7.30	7.58	-3.7
<b>Alabama</b>						
Btu	13,932	14,249	13,857	14,013	13,606	3.0
Sulfur	1.01	0.91	1.06	1.00	1.13	-10.8
Ash	6.79	6.53	8.06	6.90	8.15	-15.3
<b>Kentucky</b>						
Btu	12,785	12,972	13,323	12,864	12,938	-0.6
Sulfur	1.76	1.59	1.46	1.46	1.39	5.6
Ash	8.18	7.48	7.16	7.50	7.28	3.0
<b>Mississippi</b>						
Btu	14,863	14,835	14,763	14,766	14,734	0.2
Sulfur	0.77	0.77	0.81	0.79	0.81	-3.5
Ash	2.86	3.79	3.40	3.55	3.73	-4.9
<b>Tennessee</b>						
Btu	12,946	13,013	12,912	12,970	12,928	0.3
Sulfur	1.35	1.32	1.48	1.37	1.50	-8.3

Census division and state¹	October - December 2023	July - September 2023	October - December 2022	Year to date		Percent change
				2023	2022	
Ash	7.67	7.67	7.31	7.78	7.40	5.1
<b>West South Central</b>						
Btu	10,223	9,690	9,932	10,050	10,097	-0.5
Sulfur	0.96	0.79	0.70	0.75	0.66	13.3
Ash	7.91	8.44	8.46	8.11	7.91	2.5
<b>Arkansas</b>						
Btu	11,151	11,293	11,201	11,379	11,323	0.5
Sulfur	1.63	1.59	1.43	1.36	1.19	13.7
Ash	10.49	10.99	10.27	10.18	9.21	10.6
<b>Louisiana</b>						
Btu	7,489	7,489	7,489	7,489	7,489	s
Sulfur	0.51	0.51	0.58	0.51	0.55	-7.0
Ash	5.92	6.86	6.42	6.56	7.21	-9.0
<b>Oklahoma</b>						
Btu	12,328	10,796	10,826	10,462	11,240	-6.9
Sulfur	1.47	0.94	0.56	0.68	0.64	6.1
Ash	8.89	8.34	6.30	7.35	7.11	3.4
<b>Texas</b>						
Btu	11,370	11,444	11,584	11,497	11,613	-1.0
Sulfur	0.91	0.64	0.57	0.74	0.54	37.2
Ash	8.25	9.79	11.15	9.30	8.72	6.6
<b>Mountain</b>						
Btu	10,722	10,710	10,321	10,666	10,600	0.6
Sulfur	0.57	0.61	0.53	0.58	0.51	12.7
Ash	6.92	6.87	6.39	6.77	6.52	3.8
<b>Arizona</b>						
Btu	11,479	11,403	11,331	11,397	11,532	-1.2
Sulfur	0.61	0.69	0.65	0.65	0.65	s
Ash	10.16	11.88	10.00	10.86	9.28	17.0
<b>Colorado</b>						
Btu	11,654	11,627	11,653	11,660	11,819	-1.3
Sulfur	0.55	0.65	0.71	0.56	0.61	-8.3
Ash	9.90	11.29	8.87	10.70	8.45	26.6
<b>Idaho</b>						
Btu	11,873	11,905	12,168	11,735	12,297	-4.6
Sulfur	0.87	0.85	0.52	0.81	0.58	39.5
Ash	10.10	10.05	9.66	10.23	9.26	10.5
<b>Montana</b>						
Btu	9,258	9,529	8,554	9,542	9,081	5.1
Sulfur	0.31	0.43	0.35	0.38	0.35	8.0
Ash	5.26	5.71	5.01	5.42	5.15	5.2
<b>Nevada</b>						
Btu	11,783	11,399	11,597	11,466	11,516	-0.4
Sulfur	0.48	0.51	0.48	0.48	0.46	4.4
Ash	10.23	9.80	10.03	9.90	9.86	0.4
<b>New Mexico</b>						
Btu	11,306	11,347	11,928	11,563	12,205	-5.3
Sulfur	0.75	0.78	0.83	0.75	0.71	5.6
Ash	12.01	13.01	12.38	12.74	10.31	23.6
<b>Utah</b>						
Btu	11,530	11,547	11,379	11,448	11,631	-1.6
Sulfur	0.48	0.48	0.45	0.48	0.44	8.3
Ash	8.89	8.59	9.19	9.01	10.24	-12.0
<b>Wyoming</b>						
Btu	10,168	10,252	9,809	10,157	10,000	1.6
Sulfur	0.63	0.64	0.54	0.62	0.52	20.0
Ash	4.26	3.92	4.08	4.02	4.24	-5.4
<b>Pacific</b>						
Btu	11,279	11,096	11,125	11,168	11,254	-0.8
Sulfur	0.56	0.71	0.45	0.57	0.43	32.3
Ash	8.98	10.54	8.35	9.43	8.11	16.2

Census division and state <sup>1</sup>	October - December 2023	July - September 2023	October - December 2022	Year to date		Percent change
				2023	2022	
<b>California</b>						
Btu	11,322	11,196	11,206	11,257	11,366	-1.0
Sulfur	0.57	0.73	0.46	0.58	0.42	36.6
Ash	9.25	10.87	8.43	9.73	8.21	18.6
<b>Oregon</b>						
Btu	11,759	-	10,864	11,695	11,162	4.8
Sulfur	0.60	-	0.32	0.60	0.64	-6.4
Ash	8.34	-	10.45	8.79	10.48	-16.1
<b>Washington</b>						
Btu	9,363	9,362	9,340	9,356	9,395	-0.4
Sulfur	0.38	0.34	0.33	0.34	0.35	-2.1
Ash	4.68	4.75	5.01	4.60	4.66	-1.4
<b>U.S. Total</b>						
Btu	12,042	12,122	11,872	11,963	11,775	1.6
Sulfur	0.98	0.95	1.00	0.95	1.00	-4.9
Ash	7.13	7.13	7.37	7.08	7.28	-2.6

<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.'