

# 2014 Minerals Yearbook

KANSAS [ADVANCE RELEASE]

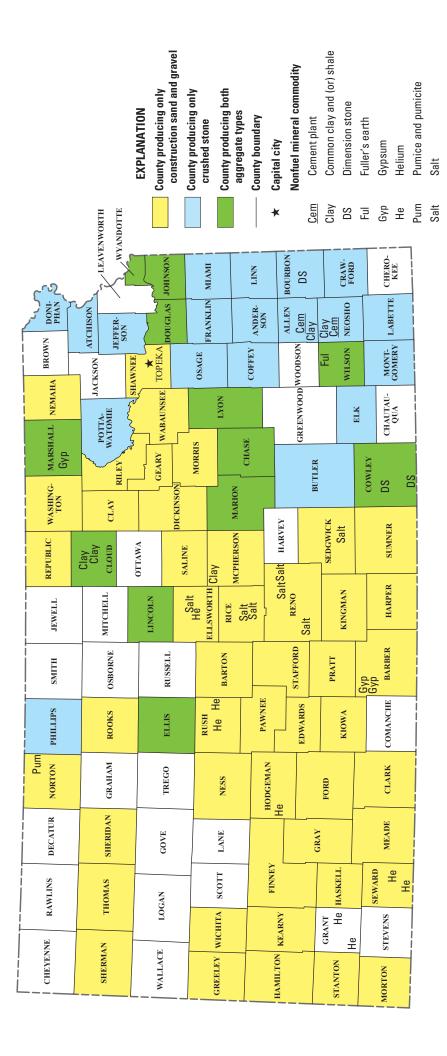




Figure 1. Map showing major nonfuel-mineral-producing areas in Kansas in 2014. Sources: Kansas Geological Survey and U.S. Geological Survey

Base from U.S. Geological Survey digital data Albers Equal-Area Conic projection

## THE MINERAL INDUSTRY OF KANSAS

### By Madan M. Singh

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Kansas Geological Survey for collecting information on all nonfuel minerals.

In 2014, the value of nonfuel mineral production<sup>1</sup> in the State of Kansas was \$584 million.<sup>2</sup> This was an 8.2% increase from the State's revised nonfuel mineral production value of \$540 million<sup>2</sup> in 2013 (table 1). Nonfuel mineral production in the State surpassed \$1 billion in value in 2007–8 and then again in 2010–11, but from 2012 onward, only partial values are presented to avoid disclosing company proprietary data (fig. 1). Based on the partial value, Kansas accounted for approximately 0.7% of the total U.S. nonfuel mineral production value in 2014, but it ranked 22d among the 50 States based on total value. On a per capita basis, Kansas had a value of \$201 in 2014 compared with the national average of \$252. In 2014, the number of nonfuel mines and the mine employment decreased from the previous year (table 2).

In 2014, the leading nonfuel mineral commodities, in alphabetical order, were construction sand and gravel, crushed stone, helium, portland cement, and salt. The helium was produced from the Hugoton and Panoma fields in Kansas. Most of the crushed stone produced in the State was limestone, primarily concentrated in the eastern one-third of the State. Minor amounts of sandstone and quartzite were also mined. Thick salt deposits in central Kansas were mined with underground and solution mining. The underground operations produced salt with impurities, which restricted its use to mainly road deicing. Solution-mined salt was suitable for table salt and other uses requiring purity.

#### **Events, Trends, and Issues**

The Helium Stewardship Act of 2013, passed October 2, 2013, made significant changes to the operation of the Federal helium program. Phase A allowed sales volumes and conditions under the Helium Privatization Act to continue until September 30, 2014. In phase B, crude helium would be auctioned off at prescribed rates until the gas stored in the Federal Helium Reserve reached 3 billion cubic feet. When this mark is reached, sales would be limited to Federal users (phase C). In phase D, the Secretary of the Interior would dispose of the remaining assets no later than September 30, 2021 (U.S. Congress, 2013).

In 2014, the production quantity of construction sand and gravel in Kansas decreased by 1.8% and crushed stone increased by 3.3% from the previous year (table 1).

#### Aggregates by State and End Use

A companion dataset, "Aggregates by State and End Use," replaces the discrete aggregate tables that were included in the individual State chapters prior to 2014 and is available on the State Minerals Statistics and Information web page at https://minerals.usgs.gov/minerals/pubs/state/. This dataset is updated annually

#### **Reference Cited**

U.S. Congress, 2013, Helium Stewardship Act of 2013: U.S. Congress Public Law 113–40, October 2, 14 p. (Accessed May 23, 2018, at https://www.congress.gov/113/plaws/publ40/PLAW-113publ40.pdf.)

<sup>&</sup>lt;sup>1</sup>The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon the mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All USGS mineral production data published in this chapter are those available as of June 2017. All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—can be retrieved over the internet at http://minerals.usgs.gov/minerals

<sup>&</sup>lt;sup>2</sup>Partial total; excludes values that must be withheld to avoid disclosing company proprietary data.

 $\label{eq:table 1} \textbf{TABLE 1} \\ \textbf{NONFUEL RAW MINERAL PRODUCTION IN KANSAS}^{1,2,3}$ 

(Thousand metric tons and thousand dollars unless otherwise specified)

	2012		2013		2014	
Mineral	Quantity	Value	Quantity	Value	Quantity	Value
Cement, portland	1,730	169,000 e	1,780	178,000 e	2,010	202,000 e
Clays, common clay	296	1,750	309	1,800	364	1,860
Gemstones, natural <sup>e</sup>	NA	1	NA	1	NA	1
Salt	2,570	175,000	2,650	174,000	2,930	194,000
Sand and gravel, construction	9,780 <sup>r</sup>	53,100 <sup>r</sup>	8,700 <sup>r</sup>	48,700 <sup>r</sup>	8,540	48,700
Stone:						
Crushed	15,900	134,000 <sup>r</sup>	15,400	131,000 <sup>r</sup>	16,000	136,000
Dimension	49	4,700	43	5,610	14	1,330
Combined values of cement (masonry), clays (fuller's						
earth), gypsum (crude), helium (crude and Grade-A),						
pumice and pumicite	XX	W	XX	W	XX	W
Total	XX	538,000 r	XX	540,000 r	XX	584,000

eEstimated. Revised. NA Not available. W Withheld to avoid disclosing company proprietary data; excluded from "Total." XX Not applicable.

TABLE 2 MINING ACTIVITY IN KANSAS

Mining activity		2012	2013	2014
State rank <sup>1</sup>		21	21	22
Employment, number: <sup>2</sup>				
Nonfuel mineral mines		1,049	1,031	1,001
Mills and plants		411	450	417
Number of nonfuel mineral mines <sup>2</sup>		209	206	199
Number of mills and plants <sup>2</sup>		32	33	30
Average annual wage, all mining <sup>3</sup>	dollars per year	46,179	46,704	53,419
Average annual wage, all industries <sup>3</sup>	do.	41,814	42,294	43,529
Per capita value <sup>4</sup>	dollars per person	186	186	201
National per capita value <sup>1</sup>	do.	241	236	252
1 75				

do. Ditto.

<sup>&</sup>lt;sup>1</sup>Includes data available through June 2017.

<sup>&</sup>lt;sup>2</sup>Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

<sup>&</sup>lt;sup>3</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>1</sup>Based on unadjusted State total value.

<sup>&</sup>lt;sup>2</sup>Source: U.S. Mine Safety and Health Administration.

<sup>&</sup>lt;sup>3</sup>Source: National Mining Association.

<sup>&</sup>lt;sup>4</sup>Based on partial State total value to avoid disclosing company proprietary data.

## ${\it TABLE~3}$ STRUCTURE OF THE NONFUEL MINERAL INDUSTRY IN KANSAS

(Nonfuel-mineral-producing companies, not including aggregate producers)

Commodity	Company	County
Cement	Ash Grove Cement Co. (Chanute plant)	Neosho
Do.	Monarch Cement Co. (Humboldt plant)	Allen
Clays:		
Common clay	Ash Gove Cewment Co.	Neosho
Do.	Cloud Ceramics (3 mines)	Cloud
Do.	Clemons Coal Co. and Buildex Inc.	McPherson
Do.	General Finance Inc.	Cloud
Do.	Monarch Cement Co.	Allen
Fuller's earth, montmorillonite	Micro-Lite LLC	Wilson
Gemstones <sup>1</sup>	Various	Various
Gypsum	Georgia Pacific Corp.	Marshall
Do.	Interstate Gypsum LLC	Barber
Do.	National Gypsum Co.	Do.
Helium:	VI	
Crude	DCP Midstream LLC (National lant)	Seward
Do.	LINN Energy, Inc. (Jayhawk)	Grant
Do.	LINN Energy, Inc. (Ulysses Santana plant)	Do.
Grade-A	Air Products Corp., Inc. (Liberal plant)	Seward
Do.	Linde Global Helium, Inc. (Linde Otis plant)	Rush
Do.	Praxair, Inc. (Bushton plant)	Ellsworth
Do.	Praxair, Inc. (Ulysses/Jayhawk plant)	Grant
Near-pure <sup>2</sup>	IACX Energy, LLC (Hodgeman plant)	Hodgemen
Do.	IACX Energy, LLC (IACX Otis plant)	Rush
Pumice and pumicite	Calvert Corp.	Norton
Salt	Cargill Inc.	Reno
Do.	Compass Minerals International, Inc.	Rice
Do.	Hutchinson Salt Co.	Reno
Do.	Independent Salt Co.	Ellsworth
Do.	Lyons Salt Co. (Central Salt Co., B.S.C. Holdings)	Rice
Do.	Morton International Inc.	Reno
Do.	Occidental Chemical Corp.	Sedgwick
Stone, dimension	Bandera Stone Inc.	Bourbon
Do.	H.J. Born Stone Inc.	Cowley
Do.	Pray Building Stone Co.	Do.

Do. Ditto.

<sup>&</sup>lt;sup>1</sup>Most natural gemstone producers in the United States are small businesses that are widely dispersed and operate independently.

<sup>&</sup>lt;sup>2</sup>Near-pure does not show separately in table 1 (included with Grade-A).

