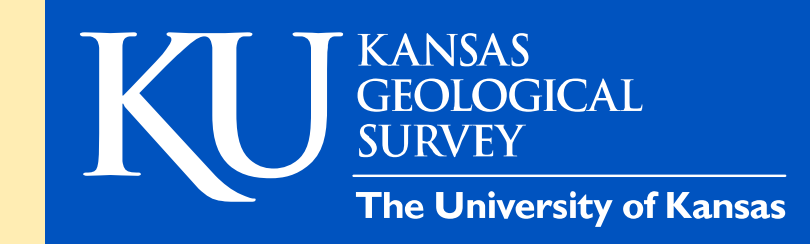


GEOLOGIC MAP OF OSAGE COUNTY, KANSAS

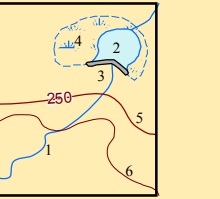
Geology by Howard G. O'Connor
Kansas Geological Survey (mapped 1954)
Originally published 1955

Geologic formation boundaries adjusted by David R. Collins
to fit 1:24,000 topographic base of the U.S. Geological Survey
2007

Computer compilation
and cartography by
Ian J. Ramirez
Jerrisa A. Ross
Kim S. Yap
Cynthia L. Weeks
Nathan J. Anderson



Hydrology and Topography



- Stream
- Arroyo
- Intermittent stream
- Seasonal stream
- Perennial stream
- Intermittent stream
- Seasonal stream
- Perennial stream

Geologic Features

- Observed fault
- Inferred fault

Index Reference Features

- 1:25,000 map edge
- Line of section
- Does not appear on this map

Geologic Unit Boundaries

- Observed contact
- Inferred contact

Township

- 1-16
- 17-32
- 33-48
- 49-64
- 65-80
- 81-96
- 97-112
- 113-128
- 129-144
- 145-160
- 161-176
- 177-192
- 193-208
- 209-224
- 225-240
- 241-256
- 257-272
- 273-288
- 289-304
- 305-320
- 321-336
- 337-352
- 353-368
- 369-384
- 385-400
- 401-416
- 417-432
- 433-448
- 449-464
- 465-480
- 481-496
- 497-512
- 513-528
- 529-544
- 545-560
- 561-576
- 577-592
- 593-608
- 609-624
- 625-640
- 641-656
- 657-672
- 673-688
- 689-704
- 705-720
- 721-736
- 737-752
- 753-768
- 769-784
- 785-800
- 801-816
- 817-832
- 833-848
- 849-864
- 865-880
- 881-896
- 897-912
- 913-928
- 929-944
- 945-960
- 961-976
- 977-992
- 993-1008
- 1009-1024
- 1025-1040
- 1041-1056
- 1057-1072
- 1073-1088
- 1089-1104
- 1105-1120
- 1121-1136
- 1137-1152
- 1153-1168
- 1169-1184
- 1185-1200
- 1201-1216
- 1217-1232
- 1233-1248
- 1249-1264
- 1265-1280
- 1281-1296
- 1297-1312
- 1313-1328
- 1329-1344
- 1345-1360
- 1361-1376
- 1377-1392
- 1393-1408
- 1409-1424
- 1425-1440
- 1441-1456
- 1457-1472
- 1473-1488
- 1489-1504
- 1505-1520
- 1521-1536
- 1537-1552
- 1553-1568
- 1569-1584
- 1585-1600
- 1601-1616
- 1617-1632
- 1633-1648
- 1649-1664
- 1665-1680
- 1681-1696
- 1697-1712
- 1713-1728
- 1729-1744
- 1745-1760
- 1761-1776
- 1777-1792
- 1793-1808
- 1809-1824
- 1825-1840
- 1841-1856
- 1857-1872
- 1873-1888
- 1889-1904
- 1905-1920
- 1921-1936
- 1937-1952
- 1953-1968
- 1969-1984
- 1985-2000

Transportation

- Interstate highway
- Federal highway
- State highway
- Medium-duty primary road
- Medium-duty secondary road
- Roadway secondary road
- Asphalt

Boundaries and Locations

- State line
- County line
- Township Range line
- Section line
- Park boundary
- County seat
- Locality
- City boundary
- Does not appear on this map

Resource Development

- Quarry
- Mine
- Oil well
- Gas well

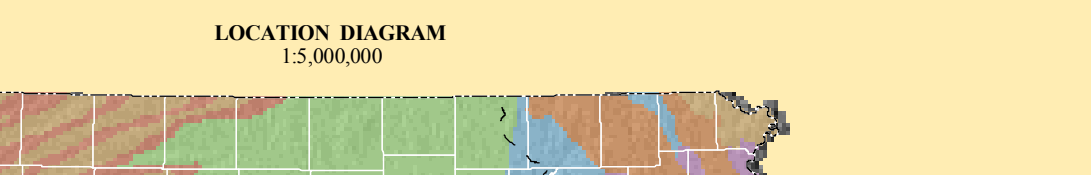
CONVERSION TABLE

Feet	Meters
1	0.3048
10	3.048
100	30.48
1,000	304.8
10,000	3,048
100,000	30,480
1,000,000	304,800
10,000,000	3,048,000
100,000,000	30,480,000
1,000,000,000	304,800,000

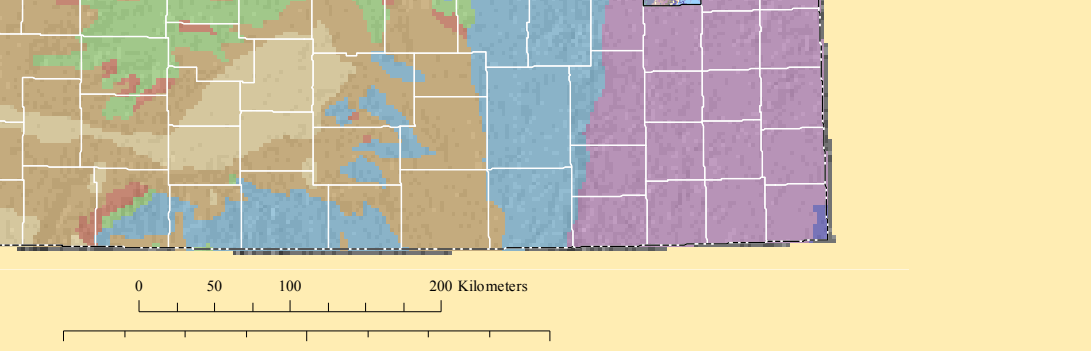
To convert feet to meters multiply by 0.3048
To convert meters to feet multiply by 3.2808
To convert kilometers to miles multiply by 0.6214
To convert miles to kilometers multiply by 1.6093

Scale 1:50,000
Lambert Conformal Conic Projection
with standard parallels at 37° and 43°
North American Datum of 1983

LOCATION DIAGRAM
1:250,000



GENERALIZED GEOLOGY OF KANSAS



QUATERNARY SYSTEM	TERTIARY SYSTEM	MISSISSIPPIAN SYSTEM
Recent - Pleistocene Series	Pliocene Series	Pennsylvanian System
Lower and middle Pleistocene	Upper Pliocene	Carboniferous System
Sand dunes	Lower Pliocene	Permian System
Clay drift deposits	Upper Pliocene	
Limits of Kansas glacial		

Index to 1:24,000 maps

Map No.	Year	Scale
1	1952 (12 PR)	1:250,000
2	1952 (12 PR)	1:250,000
3	1952 (12 PR)	1:250,000
4	1955	1:250,000
5	1957	1:250,000
6	1971	1:250,000
7	1965	1:250,000
8	1965	1:250,000
9	1971	1:250,000
10	1971	1:250,000
11	1967 (13 PR)	1:250,000
12	1965	1:250,000
13	1967 (13 PR)	1:250,000
14	1971 (13 PR)	1:250,000
15	1967 (13 PR)	1:250,000
16	1967 (13 PR)	1:250,000

Adjustment Techniques
This map is based on the interpretation of O'Connor (1955). Field work for the original map was done in the early 1950's without the benefit of modern topographic and base maps. The techniques for developing the original version - a process that adapts the original geologic data to modern topographic maps - were described by Ross (1966). Collins (1970) used by Jones and Collins (1971). Interpretations of the 1:250,000 scale map have been made in the process, which included reference to other sources and limited field checking. Geologic information and contact relationships were transferred from the original geologic map to a modern 1:24,000 scale topographic base. The 1:24,000 scale topographic map was digitized, and the resulting data digitized into databases using standard methodology.

References
Collins, D. R., 1997. Mining information from published geologic maps (an overview) in Digital Mapping Techniques: Methods for Geologic Map Data Capture, Management, and Publication, D. R. Soller, ed., U.S. Geological Survey, Open-File Report 97-269, p. 5-36.
O'Connor, H. G., 1955. And geology of Osage County, Kansas, in Geology, Mineral Resources, and Ground-water Resources of Osage County, Kansas. Kansas Geological Survey, v. 15, part 1, plate 1, scale = 1:125,000 (map published 1957).

Ross, J. A., 1996. Compilation of digital geologic map data at the Kansas Geological Survey - Report to the Working Group on Data Capture, Digital Geologic Map Standards Committee, American Association of State Geologists and United States Geological Survey. Kansas Geological Survey, Open-File Report 96-279.

Ross, J. A., and Collins, D. R., 1991. Information content from previously published maps in Digital Mapping Techniques: Proceedings of a Workshop on Digital Mapping Techniques: Methods for Geologic Map Data Capture, Management, and Publication, D. R. Soller, ed., U.S. Geological Survey, Open-File Report 97-269, p. 51-56.

This map was produced using the ArcGIS system developed by ESRI (Environmental Systems Research Institute, Inc.).

The Kansas Geological Survey does not warrant this map to be free from errors or inaccuracies and disclaims any responsibility or liability for any errors or inaccuracies that may appear on this map or for any decisions based thereon.

Supplemental reference to this map:
O'Connor, H. G. (1955) 1957. Geologic Map of Osage County, Kansas (topographic base) in Geology, Mineral Resources, and Ground-water Resources of Osage County, Kansas, in Kansas Geological Survey, Open-File Report 57-269, p. 51-56.

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