KANSAS GEOLOGICAL SURVEY
THE UNIVERSITY OF KANSAS
MAP M-92

GEOLOGIC MAP OF JOHNSON COUNTY, KANSAS

2000

Geology mapped by Howard G. O'Connor in 1954–1961

Computer compilation
and cartography by
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Composite Stratigraphic Section	Member	Formation	Stage or Age	Series	System
Qal	alluvium			HOLOCENE	QUATERNARY
Qtn		Newman terrace	Wisconsinan		
Qka	till	Undifferentiated fluvial and lacustrine deposits	Illinoian	PLEISTOCENE	
Pdl	Ireland Ss Robbins Sh	Lawrence Fm	Kansan		
Pds	Tonganoxie Ss Weston Sh	Stranger Fm	Douglas	VIRGILIAN	PENNSYLVANIAN
Pls	South Bend Ls Rock Lake Sh Stoner Ls Eudora Ls Captain Creek Ls	Stanton Ls	Lansing		
Plp	Spring Hill Ls Hickory Creek Sh Merriam Ls	Vilas Sh Plattsburg Ls			
Pkw	Bonner Springs Sh Farley Ls Island Creek Sh Argentine Ls Quindaro Sh Frisbie Ls	Lane Sh Wyandotte Ls Liberty Memorial Sh	Zarah Subgroup	MISSOURIAN	
Pki	Raytown Ls Munice Creek Sh Popola Ls Cottage Grove Ss Thayer coal Noxie Ss Cement City Ls Quivira Sh	Iola Ls Chanute Sh Dewey Ls Nellie Bly Fm	Linn Subgroup	Kansas City	
Pkd	Westerville (Drum) Ls Wea Sh Block Ls Fontana Sh	Cherryvale Sh			
Pksdc	Winterset Ls Stark Sh Bethany Falls Ls	Dennis Ls Galesburg Sh Swope Ls	Bronson Subgroup		

(Stratigraphic column by D.F. Merriam)

EXPLANATION

- Siltstone
- Sand and gravel, conglomerate, or "marlor beds"
- Sandstone or sand
- Shale with concretions
- Limestone
- Crossbedded limestone
- Cherty limestone
- Shale or claystone
- Calcareous shale
- Coal or lignite
- Unconformity

LOCATION DIAGRAM

CONVERSION TABLE

feet	meters	kilometers	miles
1	0.3048	0.0003	0.00019
3.2808	1	0.001	0.00062
3280.8	1000	1	0.6214
5280	1609.4	1.6094	1

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 1.6094

GN 1°10'
MN 6°

Convergence (GN) and 1981 magnetic declination (MN) at center of map.
Diagram is approximate

Lambert Conformal Conic Projection
with standard parallels at 33° and 45°

SCALE 1:50,000

0 1 2 3 Miles
0 1 2 3 Kilometers

Elevation contours are presented for general reference. They are taken from USGS Digital Line Graph (DLG) files compiled from base maps at a scale of 1:100,000. In some places the contours from the DLG's may be more generalized than the base maps used for compilation of geologic outcrop patterns. Outcrop patterns on the map will typically reflect topographic variation more accurately than the associated contour lines. Repeated fluctuation at an outcrop line across a contour line should be interpreted as an indication that the mapped rock unit is maintaining a relatively constant elevation along a generalized contour.

This map was produced by computer-aided cartography using the GIMMAP (Geodata Interactive Management Map Analysis and Production) system developed at the Kansas Geological Survey.

Roads and highways are shown on the base map as represented by data in the Kansas Cartographic Database. This data is derived primarily from U.S. Geological Survey 1:24,000 – scale topographic maps. As accurate data is acquired, the base map will be revised to reflect new highway construction (not yet represented on U.S. Geological Survey maps).

The Kansas Geological Survey does not guarantee this map to be free from errors or inaccuracies and disclaims any responsibility or liability for interpretations made from the map or decisions based thereon.

Suggested reference to this map.
O'Connor, H.G., [1972] 2000, Geologic Map of Johnson County, Kansas:
Kansas Geological Survey, Map M-92, scale 1:50,000;
revised from Bulletin 203, plate 1.

Partially funded by the National Cooperative Geologic Mapping STATEMAP Program.
ISBN NO. 1-58806-931-1

Geologic unit boundaries
1 – Observed geologic contact
2 – Inferred geologic contact
3 – Concealed geologic contact

Hydrology and topography
1 – Intermittent stream
2 – Perennial stream
3 – Areal hydrology
4 – Land subject to inundation
5 – Elevation contours (10–meter interval)
6 – Elevation contours (50–meter interval)

Geologic structure
1 – Fault
2 – Anticline*
3 – Syncline*
(solid where observed)
(dashed where inferred)
Does not appear on this map

Index reference features
1 – 1:24,000 map edge
2 – Line of cross section*
Does not appear on this map

Transportation
1 – Interstate highway
2 – Federal highway
3 – State highway
4 – Medium–duty secondary road
5 – Light–duty secondary road
6 – Unimproved secondary road
7 – Railroad
8 – Airport or landing strip

Boundaries and locations
1 – State line
2 – County line
3 – Township/Range line
4 – Section line
5 – Locality
6 – Populated area population >500

Resource development
1 – Quarry
2 – Abandoned quarry
3 – Mine
4 – Pit
5 – Oil well*
6 – Gas well*
7 – Water well*
*Does not appear on this map

6	5	4	3	2	1	
7	8	9	10	11	12	
18	17	16	15	14	13	
19	20	21	22	23	24	
30	29	28	27	26	25	
31	32	33	34	35	36	

Diagram of a township showing numbering of sections

INDEX TO PUBLIC LAND SURVEY
Range
21E 22E 23E 24E 25E
11S
12S
13S
14S
15S
Township

INDEX TO 1:24,000 SCALE MAPS

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20

PR Photorevised

1 Tonganoxie–1950 (78 PR)
2 Bonner Springs–1950 (75 PR)
3 Edwardsville–1950 (75 PR)
4 Shawnee–1964 (75 PR)
5 Kansas City–1964 (75 PR)
6 Eudora–1951 (78 PR)
7 De Soto–1951 (75 PR)
8 Olathe–1956 (75 PR)
9 Lenexa–1963 (75 PR)
10 Grandview–1964 (75 PR)
11 Edgerton–1956 (78 PR)
12 Gardner–1957 (70 PR)
13 Ocheltree–1956 (75 PR)
14 Stilwell–1956 (75 PR)
15 Belton–1953 (75 PR)
16 Wellsville–1956 (73 PR)
17 Antioch–1957 (73 PR)
18 Spring Hill–1957 (73 PR)
19 Bucyrus–1956
20 West Line–1953

Last update on 12/June/02