KANSAS GEOLOGICAL SURVEY
THE UNIVERSITY OF KANSAS
MAP M-100

GEOLOGIC MAP OF ANDERSON COUNTY, KANSAS

2001

William D. Johnson, Jr.
(U.S. Geological Survey)

Computer compilation
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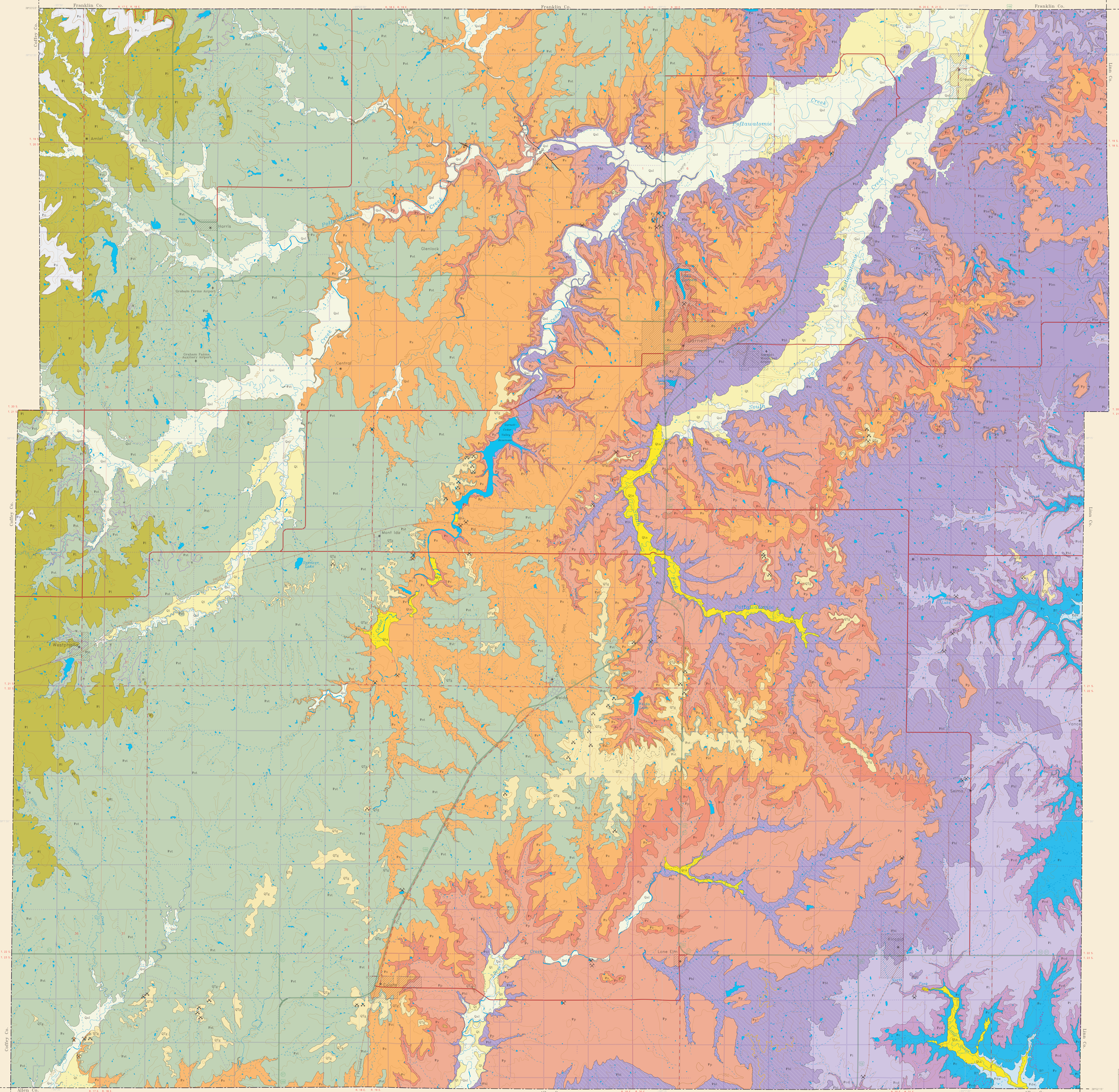
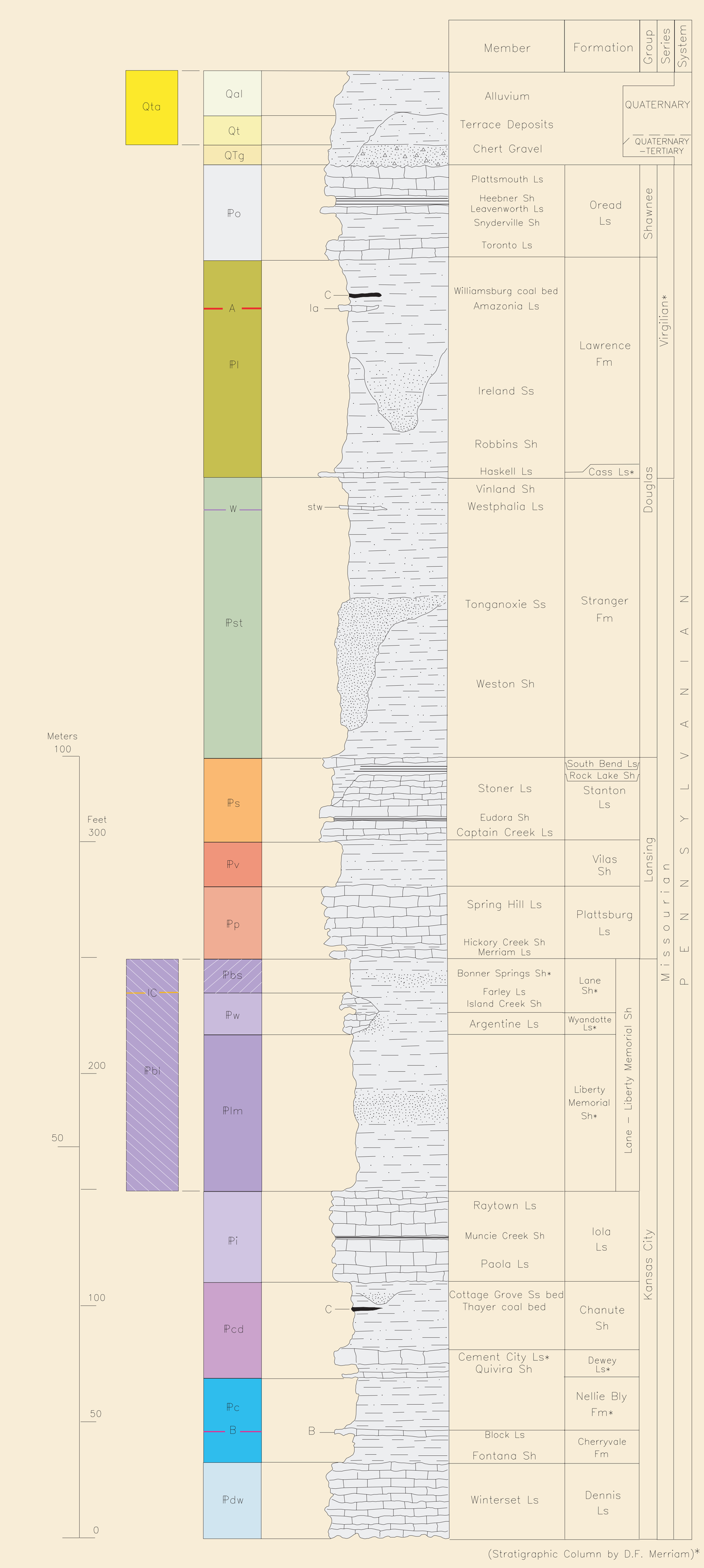




(Stratigraphic Column by D.F. Merriam)*

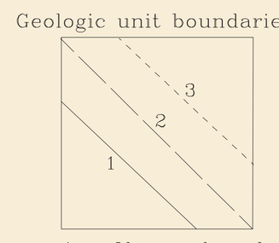
*Note: Numerous changes in stratigraphic nomenclature are shown in this digitized version of original work by W.D. Johnson Jr.: For more information on these changes, see Heckle, P.H., and Watney, W.L., in press, Revision of Stratigraphic Nomenclature and Classification of the Pleasanton, Kansas City, Lansing and Lower Part of the Douglas Groups (Lower Upper Pennsylvanian, Missourian) in Kansas: Kansas Geological Survey, Bulletin 245.

Integrity of the mapping units was maintained from the original USGS I-Maps: Geologic Map of the Harris Quadrangle and Parts of the Waverly SE, Williamsburg, and Waverly Quadrangles, Anderson County, Kansas: U.S. Geological Survey, Map I-2273, scale 1:24,000, 1992; Geologic Map of the Garnett West and Part of the Richmond Quadrangle, Anderson County, Kansas: U.S. Geological Survey, Map I-2302, scale 1:24,000, 1992. Geologic Map of the Garnett East Quadrangle and Parts of the Garnett SE. Garnett NW, and Lane Quadrangles, Anderson County, Kansas: U.S. Geological Survey, Map I-2303, scale 1:24,000, 1992, Geologic Map of the Bush City Quadrangle and Parts of the Kincaid, Centerville and Blue Mound Quadrangles, Anderson County, Kansas: U.S. Geological Survey, Map I-2377, scale 1:24,000, 1993; Geologic Map of the Westphalia Quadrangle and Parts of the Geneva, Aliceville, and Neosho Falls Quadrangles, Anderson County, Kansas: U.S. Geological Survey, Map I-2378, scale 1:24,000, 1993; Geologic Map of the Welda Quadrangle and Part of the Colony Quadrangle, Anderson County, Kansas: U.S. Geological Survey, Map I-2379, scale 1:24,000, 1993.

EXPLANATION

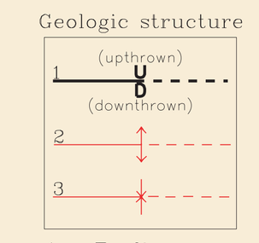
- Sandstone or sand
- Shale or claystone
- Limestone
- Chert gravel
- Black shale
- Undifferentiated sandstone or siltstone
- C — Coal or lignite locally with underclay

Geologic unit boundaries



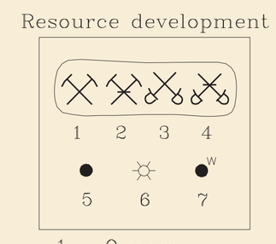
1 – Observed geologic contact
2 – Inferred geologic contact
3 – Concealed geologic contact

Geologic structure



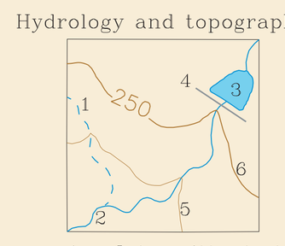
1 – Fault
2 – Anticline*
3 – Syncline*
(solid where observed)
(dashed where inferred)
** Does not appear on this map*

Resource development



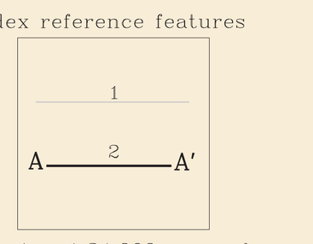
1 – Quarry
2 – Abandoned quarry
3 – Pit
4 – Abandoned Pit
5 – Oil well*
6 – Gas well*
7 – Water well*
** Does not appear on this map*

Hydrology and topography



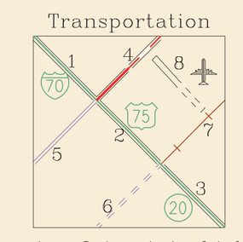
1 – Intermittent stream
2 – Perennial stream
3 – Areal hydrology
4 – Dam
5 – Elevation contours (10-meter interval)
6 – Elevation contours (50-meter interval)

Index reference features



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

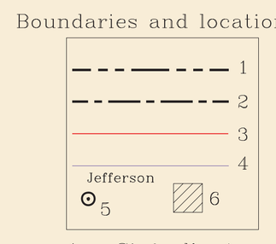
Transportation



1 – Interstate highway*
2 – Federal highway
3 – State highway
4 – Medium-duty primary and secondary roads
5 – Light-duty secondary road
6 – Unimproved secondary road
7 – Railroad
8 – Airport or landing strip
** Does not appear on this map*

The Prairie Spirit Trail

Boundaries and locations



1 – State line*
2 – County line
3 – Township/Range line
4 – Section line
5 – Locality
6 – Populated area population >500
** Does not appear on this map*

INDEX TO PUBLIC LAND SURVEY

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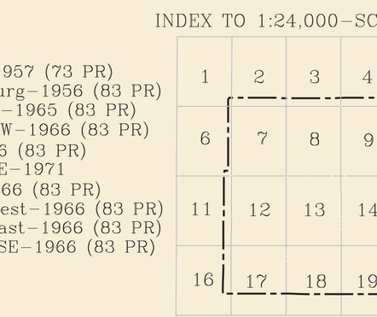
Diagram of a township showing numbering of sections

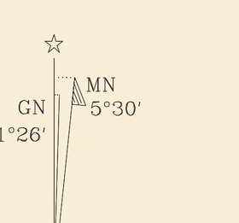
INDEX TO 1:24,000-SCALE MAPS

1 Waverly-1957 (73 PR)
2 Williamsburg-1956 (83 PR)
3 Richmond-1965 (83 PR)
4 Garnett NW-1966 (83 PR)
5 Lane-1966 (83 PR)
6 Waverly SE-1971
7 Harris-1966 (83 PR)
8 Garnett West-1966 (83 PR)
9 Garnett East-1966 (83 PR)
10 Garnett SE-1966 (83 PR)



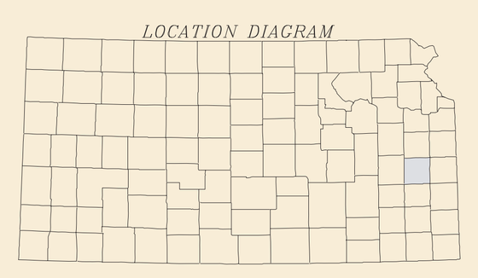
11 Aliceville-1971 (79 PR)
12 Westphalia-1966
13 Welda-1966
14 Bush City-1966 (83 PR)
15 Centerville-1966 (83 PR)
16 Neosho Falls-1971
17 Geneva-1966
18 Colony-1966
19 Kincaid-1966
20 Blue Mound-1966

PR Photorevised



Convergence (GN) and 1987 magnetic declination (MN) at center of map
Diagram is approximate

LOCATION DIAGRAM



Scale 1:50,000

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

0 1 2 3 Kilometers

0 1 2 Miles

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

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 of 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.

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 aquired, the base map will be revised to reflect new highway construction (not yet represented on the U.S. Geological Survey maps).

The geology was mapped in the field using U.S.G.S. 7.5-min. 1:24,000-scale topographic maps. A preliminary 1:63,360-scale map compiled by R.C. Moore for the 1936 edition of the state geological map was available for field checking.

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.

Geologic mapping of Anderson County, Kansas, was completed under a COGEOMAP agreement between the Kansas Geological Survey and the U.S. Geological Survey.

Suggested reference to this map:
Johnson, W.D. Jr., 2001, Geologic Map of Anderson County, Kansas: Kansas Geological Survey, Map M-100, scale 1:50,000

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