

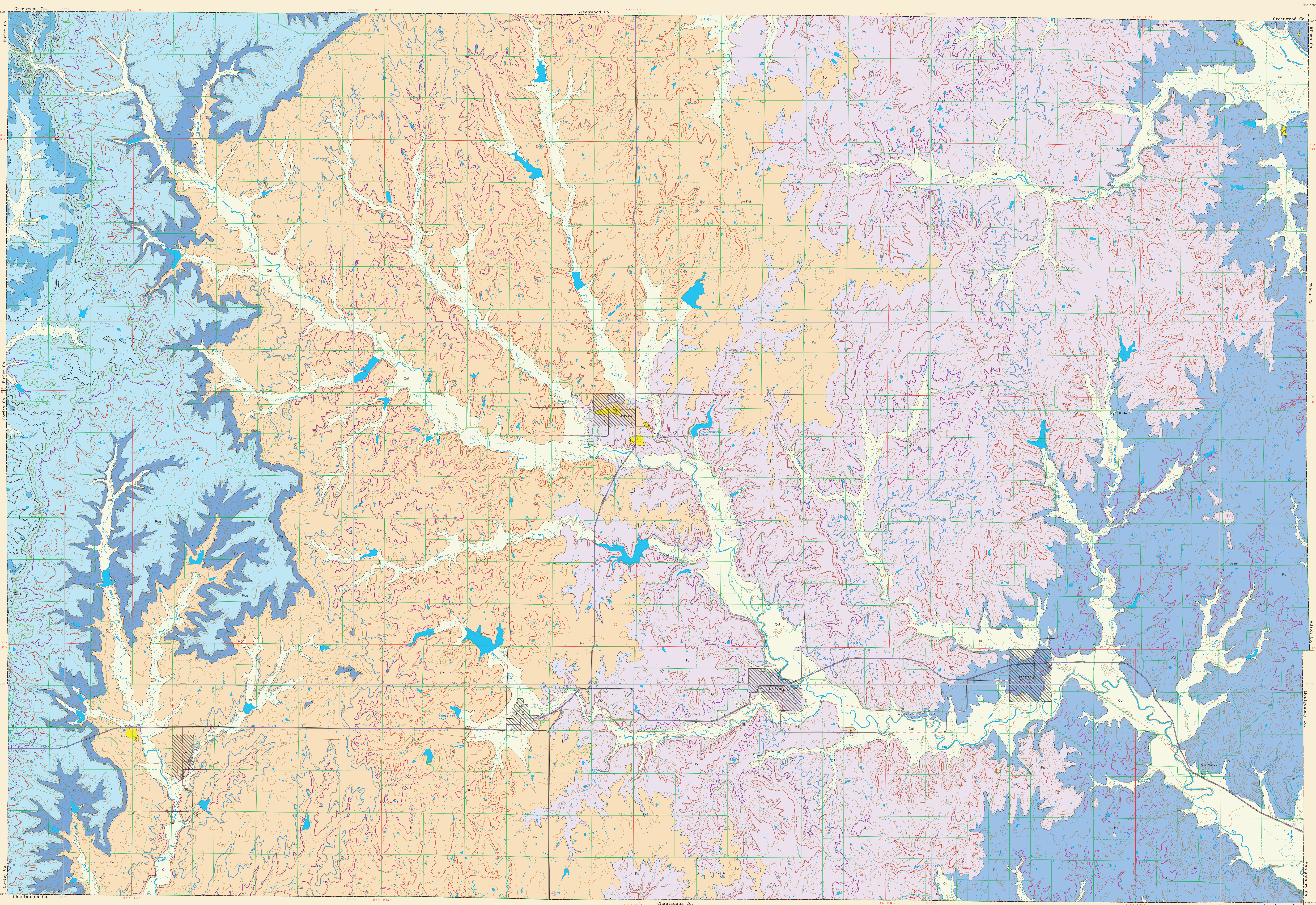
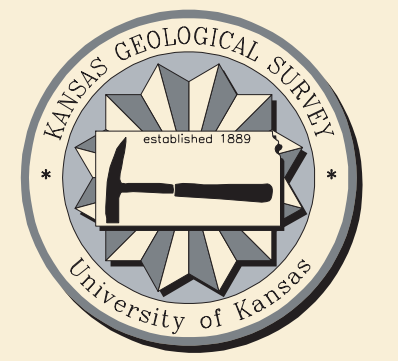
GEOLOGIC MAP OF ELK COUNTY, KANSAS

KANSAS GEOLOGICAL SURVEY
THE UNIVERSITY OF KANSAS
MAP M-49

1996

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Resource development

- 1 - Quarry
- 2 - Gravel Pit
- 3 - Sand Pit
- 4 - Oil Wells
- 5 - Gas Wells
- 6 - Water Wells
- * Does not appear on this map

Hydrology and topography

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

Geologic unit boundaries

- 1 - Observed geologic contact
- 2 - Inferred geologic contact
- 3 - Generalized geologic contact

Index reference features

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

Boundaries and locations

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

INDEX TO PUBLIC LAND SURVEY

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INDEX TO 1:24,000-SCALE MAPS

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

CONVERSION TABLE

feet	meters	kilometers	miles
0.3048	0.0003	0.0003	0.00019
3.2808	1	0.001	0.00062
3280.8	1000	1	0.62137
5280	1609.4	1.60934	1.09361

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 0.62137
To convert miles to kilometers multiply by 1.60934

EXPLANATION

Geologic column legend:

- QUATERNARY**
 - Qal Alluvium
 - Qcg chert gravels
- CRETACEOUS**
 - Wreford Ls. Wreford Limestone
 - Crouse Ls. Crouse Limestone
- PERMIAN**
 - Beattie Ls. Cottonwood Limestone Mbr
 - Esbridge Sh. Navo Limestone Mbr
 - Red Eagle Ls. Red Eagle Limestone
 - Johnson Sh. Americus Limestone Mbr
 - Foraker Ls. Five Point Limestone Mbr
- TRIASSIC**
 - Adairic
- JURASSIC**
 - Road - Road Siding Fm.
 - Water Ls. Dover Limestone Mbr
 - Willard - Pillsbury Ls. Emporia Limestone
 - Emporia Ls.
 - Auburn Sh. Wakarusa Limestone Mbr
 - Bern Ls.
- CRETACEOUS**
 - Scranton Sh. Happy Hollow Limestone Mbr
 - Howard Ls. Utopia Limestone Mbr
 - Church Ls.
 - Severy Sh. Topeka Limestone
 - Topeka Ls. Ervire Creek Limestone Mbr
 - Deer Creek Ls. Ozawika Limestone Mbr
 - Tecumseh Sh. Avoca Limestone Mbr
 - Lecompton Ls. Bell Limestone Mbr
- CRETACEOUS**
 - Spring Branch Limestone Mbr
 - Cloy Creek Limestone Mbr
 - Kanwaka Sh. Kareford Limestone Mbr
 - Dread Ls. Plattsmouth Limestone Mbr
 - Toronto Limestone Mbr
- CRETACEOUS**
 - Lawrence Fm. Amazonia Limestone Mbr
 - Haskell Limestone Mbr
 - Westphalia Limestone Mbr
 - Stranger Fm.

Approximate vertical scale, 1 inch = 75 feet
(Nomenclature follows that of Kansas Geological Survey Bulletin 189.)

CONVERGENCE (GM) and 1989 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

LOCATION DIAGRAM

Geology mapped in the field using USGS 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.

Partially funded by the US Geological Survey COGEMAP Program.

Elevation contours are presented for general reference. They are taken from USGS Digital Line Graph (DLG) files compiled from base maps of 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.

This map was produced by computer-aided cartography using the GIMAP (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 more generalized than the base maps used for compilation of geologic outcrop patterns. As accurate data is acquired, the base map will be revised to reflect new highway construction foot print represented on USGS maps.

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

Suggested reference to this map:
Merriam, D. F., 1996, Geologic Map of Elk County, Kansas, Kansas Geological Survey, Map M-49, scale 1:50,000.
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