



GEOLOGIC MAP OF MONTGOMERY COUNTY, KANSAS

1996

Geology mapped by
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KANSAS GEOLOGICAL SURVEY
THE UNIVERSITY OF KANSAS
MAP M-44

Computer compilation
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System	Formation	Composite Stratigraphic Section	Symbol	Unit	Description
QUATERNARY	Qs	Qs	[Symbol]	Qs	Alluvium
	Qd	Qd	[Symbol]	Qd	Terrace Deposits
	Fr	Fr	[Symbol]	Fr	Inland Sh Mr
	Fr	Fr	[Symbol]	Fr	Robbins Sh Mr
	Fr	Fr	[Symbol]	Fr	Haskell La Mr
	Fr	Fr	[Symbol]	Fr	Winona Sh Mr and Westphalia La Mr
	Fr	Fr	[Symbol]	Fr	Tonganoxie Sh Mr and Iolan La Mr
	Fr	Fr	[Symbol]	Fr	Undifferentiated Tolant Mr
	Fr	Fr	[Symbol]	Fr	Upper Tolant Sh bed
	Fr	Fr	[Symbol]	Fr	Middle Tolant Sh bed
	Fr	Fr	[Symbol]	Fr	High Tolant Sh bed
VIRGINIAN	Stanger	Stanger	[Symbol]	Stanger	Stanger Sh Mr
	Stanger	Stanger	[Symbol]	Stanger	Stanger Sh Mr
	Stanger	Stanger	[Symbol]	Stanger	Stanger Sh Mr
	Stanger	Stanger	[Symbol]	Stanger	Stanger Sh Mr
	Stanger	Stanger	[Symbol]	Stanger	Stanger Sh Mr
	Stanger	Stanger	[Symbol]	Stanger	Stanger Sh Mr
	Stanger	Stanger	[Symbol]	Stanger	Stanger Sh Mr
	Stanger	Stanger	[Symbol]	Stanger	Stanger Sh Mr
	Stanger	Stanger	[Symbol]	Stanger	Stanger Sh Mr
	Stanger	Stanger	[Symbol]	Stanger	Stanger Sh Mr
	Stanger	Stanger	[Symbol]	Stanger	Stanger Sh Mr
PENNSYLVANIAN	Stanton La	Stanton La	[Symbol]	Stanton La	Stanton La Mr
	Vilas Sh	Vilas Sh	[Symbol]	Vilas Sh	Vilas Sh
	Plattburg La	Plattburg La	[Symbol]	Plattburg La	Plattburg La
	Lane Sh	Lane Sh	[Symbol]	Lane Sh	Lane Sh and Wyandotte La
	Wyandotte La	Wyandotte La	[Symbol]	Wyandotte La	Wyandotte La
	Ma La	Ma La	[Symbol]	Ma La	Ma La
	Chouteau Sh	Chouteau Sh	[Symbol]	Chouteau Sh	Chouteau Sh
	Deeey La	Deeey La	[Symbol]	Deeey La	Deeey La
	Nettle By Fr	Nettle By Fr	[Symbol]	Nettle By Fr	Nettle By Formation
	Dum La	Dum La	[Symbol]	Dum La	Dum La (Formation)
	Cherryvale Sh	Cherryvale Sh	[Symbol]	Cherryvale Sh	Cherryvale Formation
Dennis La	Dennis La	[Symbol]	Dennis La	Dennis La	
Goeburg Sh	Goeburg Sh	[Symbol]	Goeburg Sh	Goeburg Sh	
Round Valley La	Round Valley La	[Symbol]	Round Valley La	Round Valley La	
Lafayette Sh	Lafayette Sh	[Symbol]	Lafayette Sh	Lafayette Sh	
Scipio La	Scipio La	[Symbol]	Scipio La	Scipio La	
Marion La	Marion La	[Symbol]	Marion La	Marion La	
Cherokee La	Cherokee La	[Symbol]	Cherokee La	Cherokee La	
Seminole Fr	Seminole Fr	[Symbol]	Seminole Fr	Seminole Formation	
Lost Branch Fr	Lost Branch Fr	[Symbol]	Lost Branch Fr	Lost Branch Formation	
Lengach La	Lengach La	[Symbol]	Lengach La	Lengach La	
Novato Sh	Novato Sh	[Symbol]	Novato Sh	Novato Sh	
Altamont La	Altamont La	[Symbol]	Altamont La	Altamont La	
MISSISSIPPIAN	Altamont La	Altamont La	[Symbol]	Altamont La	Altamont La
	Altamont La	Altamont La	[Symbol]	Altamont La	Altamont La
	Altamont La	Altamont La	[Symbol]	Altamont La	Altamont La
	Altamont La	Altamont La	[Symbol]	Altamont La	Altamont La
	Altamont La	Altamont La	[Symbol]	Altamont La	Altamont La
	Altamont La	Altamont La	[Symbol]	Altamont La	Altamont La
	Altamont La	Altamont La	[Symbol]	Altamont La	Altamont La
	Altamont La	Altamont La	[Symbol]	Altamont La	Altamont La
	Altamont La	Altamont La	[Symbol]	Altamont La	Altamont La
	Altamont La	Altamont La	[Symbol]	Altamont La	Altamont La
	Altamont La	Altamont La	[Symbol]	Altamont La	Altamont La

- EXPLANATION**
- [Symbol] Sand and gravel, conglomerate, or minor beds
 - [Symbol] Sandstone or sand
 - [Symbol] Shale or claystone
 - [Symbol] Black shale
 - [Symbol] Salt
 - [Symbol] Colored shale
 - [Symbol] Coal or lignite body with underlying
 - [Symbol] Limestone
- TRANSPORTATION**
- 1 - Interstate highway
 - 2 - Federal highway
 - 3 - State highway
 - 4 - National or secondary road
 - 5 - Light-duty secondary road
 - 6 - Heavy-duty secondary road
 - 7 - Railroad
 - 8 - State line
 - 9 - County line
 - 10 - Township/Range line
 - 11 - Section
 - 12 - Locality
 - 13 - Population area population >500
- BOUNDARIES AND LOCATIONS**
- 1 - State line
 - 2 - County line
 - 3 - Township/Range line
 - 4 - Section
 - 5 - Locality
 - 6 - Population area population >500
- HYDROLOGY AND TOPOGRAPHY**
- 1 - Intermittent stream
 - 2 - Perennial stream
 - 3 - Arroyo
 - 4 - Artificial canal
 - 5 - Dam
 - 6 - Elevation contour (10-foot interval)
 - 7 - Elevation contour (20-foot interval)

CONVERSION TABLE

Feet	Meters	Kilometers	Miles
3,280.8	1.000	0.000621	0.000379
3,280.8	1.000	0.000621	0.000379
3,280.8	1.000	0.000621	0.000379
3,280.8	1.000	0.000621	0.000379

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

0 1 2 3 Kilometers

0 1 2 3 Miles

GEOLOGIC HISTORY AND STRATIGRAPHY OF MONTGOMERY COUNTY, KANSAS

GENERAL GEOLOGY: The geology of Montgomery County is composed of approximately 2000 years of geologic history. The geologic record in the county is composed of the following units: Quaternary, Pennsylvanian, and Mississippian. The Quaternary units are composed of alluvium, terrace deposits, and inland, Robbins, Haskell, Winona, Tonganoxie, and Iolan formations. The Pennsylvanian units are composed of the Stanger, Stanton, Vilas, Plattburg, Lane, Wyandotte, Ma, Chouteau, Deeey, Nettle By, Dum, Cherryvale, Dennis, Goeburg, Round Valley, Lafayette, Scipio, Marion, Cherokee, Seminole, Lost Branch, Lengach, and Novato formations. The Mississippian units are composed of the Altamont formation.

STRATIGRAPHIC CORRELATION: The geologic units in Montgomery County are correlated with the units in the adjacent counties of Lawrence, Topeka, and Emporia. The correlation is based on the lithology and fossil content of the units. The units in Montgomery County are generally younger than the units in the adjacent counties.

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