

**Bibliography and index of theses and dissertations
on Kansas geology
(1884–1984)**

compiled by

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Kansas Geological Survey

Kansas Geological Survey

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Kansas Geological Survey
Open-file Report

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Introduction

The Kansas Geological Survey has long recognized the importance of collecting bibliographic information on geologic research conducted in Kansas. In 1977 with Bulletin 213, the Survey published its first comprehensive bibliography on Kansas geology. In the 10 years since that volume appeared, the need for an update has become apparent and a decision was made to produce a computer-based bibliography. In 1986, the Survey's library staff undertook initial steps to develop an in-house data base capable of storing and retrieving bibliographic data on geologic studies of Kansas. This data base has been designed to serve two primary functions: production of published bibliographies and indices and custom on-line literature searches. At present, nearly 10,000 references from all areas of the geological sciences have been collected, including water and mineral resources, geochemistry, soil science, and environmental geology. In addition to references appearing in published sources, the titles of many unpublished manuscripts, such as open-file reports, theses, and dissertations, have been included in the data base.

Although more than a century of research on Kansas geology has been done by hundreds of graduate students, no single index to this valuable source of information exists. The following bibliography of 870 theses and dissertations is intended to fill that gap and as such represents the first phase in the release of a comprehensive bibliography on Kansas geology. It has been compiled in part from published bibliographies; however, a diligent effort has been made to collect relevant title information directly from many geology departments and university libraries throughout the United States. Whenever possible, a copy of the paper was examined to verify citation information and to assist with indexing. Because of the continuing importance of graduate studies to ongoing geologic research in Kansas, updates to this bibliography will appear annually.

Organization and Use

This bibliography is arranged in the following fashion. An index to degree and school abbreviations is included at the front. The bibliography proper follows and is arranged alphabetically by the author's last name and initials, and then chronologically by year each degree was

granted. The bibliography is followed by three indices: subject, county, and rock-unit. The subject index is based on a broad-to-narrow search logic modeled after and modified from the GeoRef system of the American Geological Institute. Synonymous terms as well as many second- and third-level terms have been cross-referenced to direct the user to the appropriate index entry. Following the subject index are county and rock-unit indices. Most users with a particular geographic area or stratigraphic interval of interest should start their search with these indices. In an effort to aid the user, references listed under a given entry in these indices have been further categorized by primary subject content as well. The rock-unit index contains both formal rock-stratigraphic names and provincial series names, and informal or outdated rock-unit terms as they appear in manuscripts. Whenever possible, these informal terms have been cross-referenced to probable formal equivalents. Finally, county outline and simplified geologic maps are included at the back.

Availability















In most cases, copies of theses and dissertations are available for inspection at the institution granting the degree or through the Interlibrary Loan services of participating libraries. A few older reports are available only in a published form, and these have been noted as such. In addition, the Survey's library maintains a set of about 100 theses and dissertations as part of the Survey's open-file collection. Unbound xerox copies of such reports may be purchased from the Library, Kansas Geological Survey, Lawrence, Kansas. Microform and paper copies of most dissertations completed after 1955 also are available for purchase from University Microfilms International, Ann Arbor, Michigan. Papers with an NTIS number listed are available for purchase through the National Technical Information Service, Springfield, Virginia.

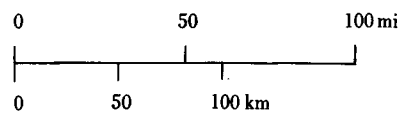
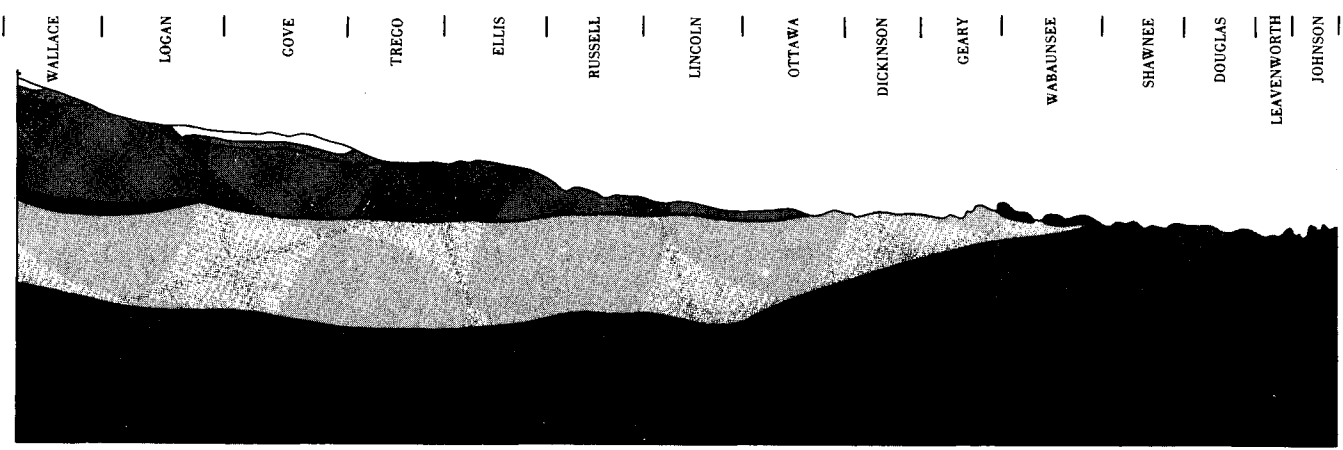
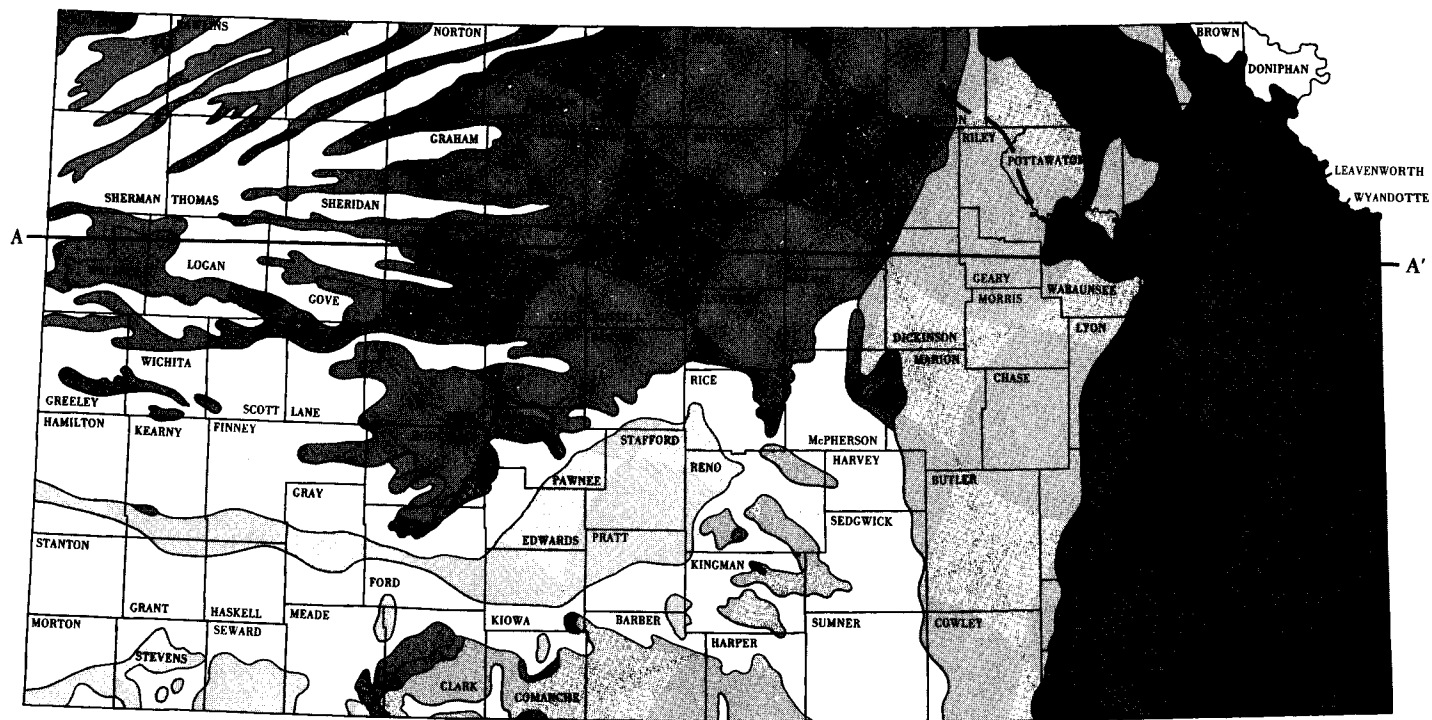
Corrections

In spite of an attempt at accuracy and completeness, this listing undoubtedly contains some errors and omissions. Please submit any corrections or additions to the Survey's library.

Generalized Geologic Map of Kansas

EXPLANATION

-  QUATERNARY SYSTEM
Loess and river valley deposits
-  Sand dunes
-  Glacial drift deposits
-  Limit of Kansan Glacier
-  TERTIARY SYSTEM
-  CRETACEOUS SYSTEM
-  JURASSIC SYSTEM
-  PERMIAN SYSTEM
-  PENNSYLVANIAN SYSTEM
-  MISSISSIPPIAN SYSTEM
-  SILURIAN-DEVONIAN SYSTEMS
-  CAMBRIAN-ORDOVICIAN SYSTEMS
-  PRECAMBRIAN SYSTEM
-  A—A' Line of cross section



Geologic cross section below I-70

Abbreviations

- B.S. thesis, Kans. St. Univ., Manhattan, KS
 Unpubl. B.S. thesis, Kansas State University, Manhattan, KS
- D.E. dissert., Dept. Chem. Petrol. Eng., Univ. Kans., Lawrence, KS
 Unpubl. D.E. dissertation, Department of Chemical and Petroleum Engineering, University of Kansas, Lawrence, KS
- D.Ed. dissert., Dept. Earth Sci., Penn. St. Univ., University Park, PA
 Unpubl. D.Ed. dissertation, Department of Earth Science, Pennsylvania State University, University Park, PA
- Eng. Mines thesis, Dept. Geol. Geophys., Univ. Miss., Rolla, MO
 Unpubl. Engineer of Mines thesis, Department of Geology and Geophysics, University of Missouri, Rolla, MO
- M.A. thesis, Colo. Coll., Colorado Springs, CO
 Unpubl. M.A. thesis, Colorado College, Colorado Springs, CO
- M.A. thesis, Columbia Univ., New York, NY
 Unpubl. M.A. thesis, Columbia University, New York, NY
- M.A. thesis, Dept. Anthro, Univ. Kans., Lawrence, KS
 Unpubl. M.A. thesis, Department of Anthropology, University of Kansas, Lawrence, KS
- M.A. thesis, Dept. Bot., Univ. Kans., Lawrence, KS
 Unpubl. M.A. thesis, Department of Botany, University of Kansas, Lawrence, KS
- M.A. thesis, Dept. Chem., St. Joseph Coll., W. Hartford, CT
 Unpubl. M.A. thesis, Department of Chemistry, Saint Joseph College, West Hartford, CT
- M.A. thesis, Dept. Chem., Univ. Kans., Lawrence, KS
 Unpubl. M.A. thesis, Department of Chemistry, University of Kansas, Lawrence, KS
- M.A. thesis, Dept. Econ., Univ. Kans., Lawrence, KS
 Unpubl. M.A. thesis, Department of Economics, University of Kansas, Lawrence, KS
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- M.A. thesis, Dept. Geogr.-Meteorol., Univ. Kans., Lawrence, KS
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 Unpubl. M.A. thesis, [Department of Geology], University of Kansas, Lawrence, KS
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 Unpubl. M.A. thesis, Department of Geology, University of Missouri, Columbia, MO
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 Unpubl. M.A. thesis, Department of Geology, University of Oklahoma, Norman, OK
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 Unpubl. M.A. thesis, Department of Geology, Wichita State University, Wichita, KS
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 Unpubl. M.A. thesis, Department of Geology and Geography, Kansas State University, Manhattan, KS
- M.A. thesis, Dept. His., Univ. Kans., Lawrence, KS
 Unpubl. M.A. thesis, Department of History, University of Kansas, Lawrence, KS
- M.A. thesis, Dept. Sys. Ecol., Univ. Kans., Lawrence, KS
 Unpubl. M.A. thesis, Department of Systematics and Ecology, University of Kansas, Lawrence, KS
- M.A. thesis, Dept. Zool., Univ. Kans., Lawrence, KS
 Unpubl. M.A. thesis, Department of Zoology, University of Kansas, Lawrence, KS
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 Unpubl. M.A. thesis, Kansas State Teachers College, Emporia, KS
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 M.R.A. thesis, Univ. Montana, Missoula, MT
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 M.S. report, Dept. Agron., Kans. St. Univ., Manhattan, KS
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Unpubl. Ph.D. dissertation, Department of Geology and Geophysics, University of Wyoming, Laramie, WY
- Ph.D. dissert., Dept. Geol. Miner., Univ. Mich., Ann Arbor, MI
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clay mineralogy: Jamkhindikar, S.M., 1969
 geomorphology: Baldwin, A.D., Jr., 1963
 igneous rocks: Adams, J.W., 1959
 invertebrate paleontology: Brainard, R.H., 1978; Maerz, R.H., Jr., 1976; Spencer, R.S., 1968; Squires, J.M., 1952
 paleobotany: Anderson, R.G., 1954
 paleoecology: Baird, G.C., 1971; Pearce, R.W., 1973; Scott, D.R., 1973
 sedimentary rocks: Bergstrom, R.E., 1953; Cubitt, J.M., 1975; Hill, W.E., Jr., 1964; McMillan, N.J., 1955; Noonan, J.M., 1971; Prentice, D.L., 1971; Rutan, Debra, 1980
 sediments: Conrad, O.G., 1963

stratigraphy: Ball, S.M., 1964; Braden, W.J., 1958; Brown, W.G., 1958; Cambridge, T.R., 1959; Dixon, V.R., 1960; Monger, J.W.H., 1961
 structural analysis: Callen, J.M., 1983
Barber County
 gypsum deposits: McGregor, D.J., 1948
 invertebrate paleontology: Thompson, T.L., 1965
 sedimentary rocks: Fisher, R.D., 1977; St. Clair, P.N., 1982; Thomas, M.A., 1982
 stratigraphy: Courtier, W.H., 1934; Fay, R.O., 1961; McElroy, M.N., 1965; Neustadt, Walter, Jr., 1941; Priest, Tim, 1982; Swineford, Ada, 1954
 structural analysis: Anderson, T.E., 1949; Dwivedi, R.L., 1983; Gerhard, R.G., 1965; Kelly, T.E., 1961; Lippert, R.H., 1964; Strong, R.M., 1960; Williams, C.D., 1968
 well-logging: Bomemann, Erhard, 1979
Barton County
 clay mineralogy: Twell, C.F., 1964
 ground water: Martin, R.B., 1968
 hydrology: Alexander, J.P., 1978
 igneous rocks: Harrower, K.L., 1976
 petroleum: Amstutz, P.T., Jr., 1943; Walters, R.F., 1945
 soils: Naddih, B.I., 1960
 stratigraphy: Bergman, D.W., 1950; Courtier, W.H., 1934; Franks, P.C., 1967; McElroy, M.N., 1965
 structural analysis: Bonchonsky, A.P., 1957

Bourbon County

clay mineralogy: Tien, Pei-lin, 1973
 coal deposits: Cobb, J.C., 1981
 diagenesis: Nollsch, D.A., 1983
 environmental geology: Tippie, J.W., 1974
 geomorphology: Ham, W.E., 1939
 hydrology: Alexander, J.P., 1978

- igneous rocks: Adams, J.W., 1959
 invertebrate paleontology: Cocke, J.M., 1970; Laukel, Q.C., 1956; Qandil, Yacoub, 1961; Squires, J.M., 1952
 paleobotany: Habib, Daniel, 1960
 paleoecology: Frost, J.G., 1968
 petroleum: Gould, G.F., 1975; Schlinsog, D.G., 1982
 sedimentary rocks: Adams, D.J., 1959; Hambleton, W.W., 1951; Inden, R.F., 1968; Kidder, D.L., 1982; Muhs, D.R., 1979; Railsback, L.B., 1983; Schenk, P.E., 1963; Schroeder, R.J., 1967; Underwood, M.R., 1984; Woody, M.D., 1984; Worthington, R.E., 1982
 sedimentary structures: Hall, B.P., 1961; Perkins, T.W., 1974
 stratigraphy: Abernathy, G.E., 1936; Emery, P.A., 1962; Hatcher, D.A., 1961; Howard, L.W., 1959; Howe, W.B., 1954; Jewett, J.M., 1943; Lemmons, J.E., 1946; Mossler, J.H., 1970; Price, R.C., 1981; Ravn, R.L., 1981; Singler, C.R., 1965; Stobbe, W.J., 1971
 structural analysis: McQuillan, M.W., 1968; Osborn, J.B., 1962
- Brown County**
 geomorphology: Baldwin, A.D., Jr., 1963
 invertebrate paleontology: Reider, E.R., 1952; Spencer, R.S., 1968; Truxell, R.E., 1951
 paleoecology: Sawin, R.S., 1977
 sedimentary rocks: Laporte, L.F., 1960
 soils: Hadimani, A.S., 1967; Hanna, R.M., 1954; Schaetzl, R.J., 1983
 stratigraphy: Avers, D.D., 1968; Bernasek, R.A., 1967; Burchett, R.R., 1959; Caspall, F.C., 1970; Snyder, B.L., 1968; Stephenson, L.G., 1958
 vertebrate paleontology: Chom, J.D., 1984
- Butler County**
 areal geology: Kellogg, Donald, 1978
 clay mineralogy: Bryson, W.R., 1959; Lee, Moon J., 1972; Watkins, K.N., 1957
 enhanced recovery: Plocek, G.N., 1977
 geomorphology: Ham, W.E., 1939
 ground water: Pollock, L.[M.J.], 1982
 invertebrate paleontology: Cuffey, R.J., 1966; Edmiston, E.F., 1932; Lalicker, C.G., 1932; Newton, G.B., 1970; Simonsen, A.H., 1977; Stude, J.R., 1961; Welch, R.G., 1964
 paleobotany: Young, C.R., 1969
 paleoecology: Kues, B.S., 1975
 petroleum: Benson, D.L., 1923; Calvin, D.G., 1963; Gould, G.F., 1975; Jackson, William, 1979
 sedimentary rocks: Bascle, Barbara, 1976; Griffith, G.L., 1981; Grossnickle, W.E., 1961; Haury, C.E., 1984; Hinshaw, G.C., 1960; Sphar, J.D., 1965; White, Stanton, 1960; Woody, M.D., 1984
 stratigraphy: Brown, S.S.L., 1966; Buller, J.V., 1968; Courtier, W.H., 1934; Dishman, B.D., 1969; Hattin, D.E., 1954; Swineford, Ada, 1954; Taylor, M.H., [Jr.], 1947; Winchell, R.L., 1957
 structural analysis: Dwivedi, R.L., 1983; Ward, J.R., 1964; Wynn, L.L., 1959
 zinc ores: Seward, P.A., 1982
- Chase County**
 clay mineralogy: Bryson, W.R., 1959; Lee, Moon J., 1972; Watkins, K.N., 1957
 environmental geology: True, M.L.K., 1969
 ground water: Hansen, Thomas J., 1969
 hydrology: Alexander, J.P., 1978
 invertebrate paleontology: Cuffey, R.J., 1966; Davis, M.E., 1951; Edmiston, E.F., 1932; Ehret, A.L., Jr., 1961; Fry, H.C., Jr., 1975; Lalicker, C.G., 1932; Newton, G.B., 1970; Reider, E.R., 1952; Simonsen, A.H., 1977; Spencer, R.S., 1968; Truxell, R.E., 1951; Wells, Dana, 1929
 limestone deposits: Rummels, R.T., 1951
 paleoecology: Dietsch, H.A., 1956; Kues, B.S., 1975
 paleogeography: Wells, J.D., 1950
 petroleum: Jackson, William, 1979
 sedimentary rocks: Dowling, P.L., Jr., 1967; Laporte, L.F., 1960; Wilbur, R.O., 1956
 stratigraphy: Avers, D.D., 1968; Buller, J.V., 1968; Dishman, B.D., 1969; Empie, J.S., 1961; Garber, M.S., 1962; Hattin, D.E., 1954; McCrone, A.W., 1960; Snyder, B.L., 1968
 structural analysis: Koons, D.L., 1956; Ward, J.R., 1964
- Chautauqua County**
 clay mineralogy: Jamkhindikar, S.M., 1969
 geomorphology: Ham, W.E., 1939
 invertebrate paleontology: Andersen, R.E., 1974; Conkin, B.M., 1954; Delo, D.M., 1928; Maerz, R.H., Jr., 1976; Richards, H.G., 1955; Schroeder, M.L., 1961; Squires, J.M., 1952; Williams, C.C., 1941
 paleobotany: Carter, J.F., 1960; Hutter, T.J., 1976
 paleoecology: Brondos, M.D., 1983; Carlton, D.R., 1975; Frost, J.G., 1968; Hakes, W.G., 1972
 petroleum: Calvin, D.G., 1963
 sedimentary rocks: Adams, D.J., 1959; Crouch, M.L., 1971; Evans, J.K., 1967; Fullerton, L.B., 1970; Lane, D.W., 1958; McMillan, N.J., 1955; Moussavi-Harami, Reza, 1980; Pawel, D.T., 1975; Rutan, Debra, 1980; Schroeder, R.J., 1967; Toomey, D.F., 1964; White, Stanton, 1960; Woody, M.D., 1984
 sedimentary structures: Bower, R.R., 1961
 stratigraphy: Baker, J.M., 1984; Ball, S.M., 1964; Bernasek, R.A., 1967; Brown, S.S.L., 1966; Cooley, D.R., 1952; Fudge, M.R., 1974; Lamoreaux, S.B., 1984; Myers, D.E., 1968; Smith, C.C., 1938; Troell, A.R., Jr., 1965; Winchell, R.L., 1957; Wolf, G.V., 1984
 vertebrate paleontology: Tway, L.E., 1982
- Cherokee County**
 clay mineralogy: Tien, Pei-lin, 1973
 coal deposits: Abernathy, G.E., 1926; Chen, Chein-Pang, 1981
 diagenesis: Roy, C.J., 1936
 environmental geology: Powell, W.E., 1970; Soule, M.A., 1974; Tippie, J.W., 1974
 geomorphology: Ham, W.E., 1939; Saueracker, P.R., 1966
 hydrology: Simpson, G.M., 1961; Tobaben, D.J., 1969; Waller, W.T., 1967
 igneous rocks: Adams, J.W., 1959
 invertebrate paleontology: Maerz, R.H., Jr., 1976; Thompson, T.L., 1965
 lead ores: Geroncin, R.L., 1980; Harbaugh, J.W., 1950; Haworth, Erasmus, 1884; Netzeband, W.F., 1927; Ridge, J.D., 1935; Wallace, M.H., 1942
 limestone deposits: Rummels, R.T., 1951
 mineral deposits: Hagni, R.D., 1962; Schmidt, R.A., 1959
 paleobotany: Baxendale, R.W., 1977; Bond, T.A., 1963; Cridland, A.A., 1958; Felix, C.J., 1952; Hams, V.L., 1959; Jones, K.D., 1968; Morgan, J.L., 1955; Otto, D.A., 1967; Roth, Elmer A., 1954; Schabilion, J.T., 1967, 1969; Segal, R.H., 1966; Urban, J.B., 1962
 paleoecology: Rosowitz, D.W., 1982
 petroleum: Gould, G.F., 1975; Schlinsog, D.G., 1982
 sedimentary rocks: Adams, D.J., 1959; Hambleton, W.W., 1951; Patel, D.J., 1973; Saadallah, A.A., 1964; Woody, M.D., 1984; Worthington, R.E., 1982
 soils: Bhango, M.S., 1956; Jarvis, N.L., 1957; Voth, R.D., 1973
 stratigraphy: Abernathy, G.E., 1936; Harris, J.W., 1984; Howe, W.B., 1954; Jewett, J.M., 1943; Lemmons, J.E., 1946
 structural analysis: Abernathy, G.E., 1925; Desai, A.A., 1966; Toweh, S.H., 1978
 zinc ores: Wei, Chi-Sheng, 1975
- Cheyenne County**
 paleobotany: Segal, R.H., 1965
 paleoecology: Lammons, J.M., 1969
 petroleum: Putman, B.M., 1960
 stratigraphy: Cobban, W.A., 1949; Hockens, S.N., 1959; McMurray, K.S., 1962; Walton, R.G., 1960
 structural analysis: Mehl, R.L., 1959; Rohrbough, C.A., 1956
- Clark County**
 biostratigraphy: Cooper, W.W., 1967
 invertebrate paleontology: Scott, R.W., 1967
 paleobotany: Segal, R.H., 1965; Shumard, C.B., 1974
 sedimentary rocks: King, G.E., 1972; Robinson, R.J., 1983; Welsh, J.P., 1966
 stratigraphy: Clifton, R.L., 1925; Courtier, W.H., 1934; Malone, D.J., 1962; Mannhard, G.W., 1972; Neustadt, Walter, Jr., 1941; Renfroe, C.A., 1948; Severy, C.L., 1975; Swineford, Ada, 1954
 structural analysis: Funk, T.J., 1982; Osborn, J.B., 1962
- Clay County**
 areal geology: Beshears, G.T., 1958
 clay mineralogy: Bryson, W.R., 1959
 limestone deposits: Rummels, R.T., 1951
 sedimentary rocks: Wilbur, R.O., 1956
 sedimentary structures: Mizula, J.W., 1960
 sediments: Crumpton, C.F., 1951
 stratigraphy: Franks, P.C., 1967; Taylor, M.H., [Jr.], 1947
 structural analysis: Lorenzen, D.J., 1973

Cloud County

clay deposits: Belchic, George, 1915
 hydrology: Alexander, J.P., 1978
 paleobotany: Farley, M.B., 1982
 sedimentary structures: Mizula, J.W., 1960
 stratigraphy: Bergman, D.W., 1950;
 Cobban, W.A., 1949; Franks, P.C.,
 1967

Coffey County

enhanced recovery: Kharrat, Riyaz, 1984
 geomorphology: Ham, W.E., 1939
 geophysical surveys: Woods, R.S., 1978
 hydrology: Livingston, N.D., 1981
 invertebrate paleontology: Conkin, B.M.,
 1954; Delo, D.M., 1928; Maerz, R.H.,
 Jr., 1976; Richards, H.G., 1955;
 Squires, J.M., 1952
 paleobotany: Carter, J.F., 1960; Hutter,
 T.J., 1976
 paleoecology: Carlton, D.R., 1975; Frost,
 J.G., 1968; Hakes, W.G., 1972
 sedimentary rocks: Crouch, M.L., 1971;
 Cubitt, J.M., 1975; Evans, J.K., 1967;
 Hill, W.E., Jr., 1964; Lane, D.W., 1958;
 Lardner, J.E., 1984; Mathews, W.L.,
 1978; Schroeder, R.J., 1967; Toomey,
 D.F., 1964; Woody, M.D., 1984
 sedimentary structures: Bower, R.R., 1961
 stratigraphy: Dixon, V.R., 1960; Dorsey,
 M.T., 1978; Eastwood, W.P., 1958;
 Mendoza, H.A., 1959; Monger, J.W.H.,
 1961; Troell, A.R., Jr., 1965; Zandell,
 C.H., 1963
 vertebrate paleontology: Tway, L.E., 1982

Comanche County

invertebrate paleontology: Scott, R.W.,
 1967; Thompson, T.L., 1965
 sedimentary rocks: Fisher, R.D., 1977;
 King, G.E., 1972
 stratigraphy: Fay, R.O., 1961; Malone,
 D.J., 1962; Mannhard, G.W., 1972;
 Neustadt, Walter, Jr., 1941; Priest, Tim,
 1982; Renfroe, C.A., 1948; Swineford,
 Ada, 1954
 structural analysis: Williams, C.D., 1968
 well-logging: Bornemann, Erhard, 1979

Cowley County

areal geology: Millison, C.D., 1927;
 Smith, E.W., 1954
 biostratigraphy: Wind, F.H., 1973
 clay mineralogy: Lee, Moon J., 1972
 geomorphology: Ham, W.E., 1939
 geophysical surveys: Noah, C.G., 1956
 hydrology: Alexander, J.P., 1978
 invertebrate paleontology: Cuffey, R.J.,
 1966; Edmiston, E.F., 1932; Ehret,
 A.L., Jr., 1961; Garihan, A.B.L., 1973;
 James, B.L., 1937; Lalicker, C.G.,
 1932; Maxey, J.R., 1932; Newton, G.B.,
 1970; Perlmutter, Barry, 1971; Reider,
 E.R., 1952; Simonsen, A.H., 1977;
 Spencer, R.S., 1968; Stude, J.R., 1961;
 Truxell, R.E., 1951
 paleobotany: Young, C.R., 1969
 paleoecology: Kues, B.S., 1975
 petroleum: Calvin, D.G., 1963
 sedimentary rocks: Al-Khersan, H.F.,
 1969; Haury, C.E., 1984; Laporte, L.F.,
 1960; Sphar, J.D., 1965; White,
 Stanton, 1960; Woody, M.D., 1984
 stratigraphy: Avers, D.D., 1968; Baker,
 J.M., 1984; Bernasek, R.A., 1967;

Brown, S.S.L., 1966; Buller, J.V., 1968;
 Courtier, W.H., 1934; Dishman, B.D.,
 1969; Hattin, D.E., 1954; Lane, N.G.,
 1954; McCrone, A.W., 1960; Snyder,
 B.L., 1968; Swineford, Ada, 1954;
 Winchell, R.L., 1957

structural analysis: Booth, A.L., 1962;
 Butler, J.B., 1960; Dwivedi, R.L., 1983;
 Wagner, K.L., 1984; Ward, J.R., 1964;
 Wynn, L.L., 1959

Crawford County

clay mineralogy: Tien, Pei-lin, 1973
 coal deposits: Abernathy, G.E., 1926;
 Chen, Chein-Pang, 1981; Skubitz,
 Joseph, Jr., 1934
 environmental geology: Powell, W.E.,
 1970; Soule, M.A., 1974; Tippie, J.W.,
 1974 geochemistry: Kopsick, D.A., 1980
 geomorphology: Ham, W.E., 1939
 ground water: McClure, K.A., 1942
 hydrology: Simpson, G.M., 1961;
 Tobaben, D.J., 1969; Waller, W.T.,
 1967
 igneous rocks: Adams, J.W., 1959
 invertebrate paleontology: Alexander,
 R.D., 1953; Laukel, Q.C., 1956;
 Orlansky, Ralph, 1951
 limestone deposits: Runnels, R.T., 1951
 paleobotany: Bond, T.A., 1963; Habib,
 Daniel, 1960; Urban, J.B., 1962
 paleoecology: Rosowitz, D.W., 1982
 petroleum: Gould, G.F., 1975; Schlinsog,
 D.G., 1982
 sedimentary rocks: Adams, D.J., 1959;
 Aden, L.J., 1982; Hambleton, W.W.,
 1951; Inden, R.F., 1968; Schenk, P.E.,
 1963; Schroeder, R.J., 1967; Woody,
 M.D., 1984; Worthington, R.E., 1982
 sedimentary structures: Perkins, T.W.,
 1974
 soils: Voth, R.D., 1973
 stratigraphy: Abernathy, G.E., 1936;
 Harris, J.W., 1984; Howard, L.W.,
 1959; Howe, W.B., 1954; Jewett, J.M.,
 1943; Lemmons, J.E., 1946; Price, R.C.,
 1981

structural analysis: Abernathy, G.E., 1925

Decatur County

paleoecology: Lammons, J.M., 1969
 sediments: Metz, H.L., 1954
 soils: Badgley, W.A., 1957
 stratigraphy: Hockens, S.N., 1959;
 McElroy, M.N., 1965; McMurray, K.S.,
 1962; Miesner, J.F., 1967; Walton,
 R.G., 1960
 structural analysis: Mehl, R.L., 1959;
 Parkhurst, R.W., 1959; Rohrbough,
 C.A., 1956

Dickinson County

clay mineralogy: Bryson, W.R., 1959;
 Watkins, K.N., 1957
 geomorphology: Sloanaker, C.J., 1950
 ground water: Bell, T.C., 1974
 hydrology: Dunlap, L.E., 1977
 paleoecology: Ho, Tong-Yun, 1964
 sedimentary rocks: Cubitt, J.M., 1975
 stratigraphy: Franks, P.C., 1967; Taylor,
 M.H., [Jr.], 1947
 structural analysis: Lorenzen, D.J., 1973

Doniphan County

invertebrate paleontology: Brainard, R.H.,
 1978; Maerz, R.H., Jr., 1976; Squires,

J.M., 1952

paleoecology: Baird, G.C., 1971;
 Griesemer, A.D., 1970; Rowell, B.F.,
 1970, 1972 sedimentary rocks: Hill,
 W.E., Jr., 1964; Lane, D.W., 1958;
 McMillan, N.J., 1955; Rutan, Debra,
 1980

sediments: Conrad, O.G., 1963; Metz,
 H.L., 1954

soils: Badgley, W.A., 1957; Hanna, R.M.,
 1954; Mason, R.M., 1971

stratigraphy: Ball, S.M., 1964; Brown,
 W.G., 1958; Cambridge, T.R., 1959;
 Caspall, F.C., 1970; Einsohn, S.D.,
 1971; Monger, J.W.H., 1961

Douglas County

areal geology: Adams, L.W., 1961;
 Carlson, W.A., 1952; Davis, S.N., 1951;
 Dufford, A.E., 1953; Hirsch, J.W.,
 1966; O'Connor, H.G., 1959; Wing,
 M.E., 1921

clay mineralogy: Jamkhindikar, S.M.,
 1969; Watkins, K.N., 1957

engineering geology: Brown, S.M., Jr.,
 1971; Lentell, T.L., 1977

environmental geology: Bishop, C.S.,
 1977; Elliott, R.G., 1973

geochemistry: Kopsick, D.A., 1980

geomorphology: Elks, J.E., 1979; Hoover,
 W.F., 1932

geophysical surveys: Crow, B.B., 1960;
 Wainwright, K.E., 1960

ground water: Brothers, R.C., 1976; Vis,
 B.J., 1981

hydrology: Alexander, J.P., 1978; McCrae,
 R.O., 1954; Yukler, M.A., 1974

igneous rocks: Adams, J.W., 1959

invertebrate paleontology: Brainard, R.H.,
 1978; Brondos, M.D., 1974; Cocke,
 J.M., 1970; Conkin, B.M., 1954; Delo,
 D.M., 1928; Farmer, J.D., 1971;

Grinnell, R.S., Jr., 1958; Maerz, R.H.,
 Jr., 1976; Purrington, Wealthy, 1948;

Richards, H.G., 1955; Spencer, R.S.,
 1968; Squires, J.M., 1952; Williams,
 C.C., 1941; Zinser, R.W., 1950

limestone deposits: Runnels, R.T., 1951

paleobotany: Carter, J.F., 1960; Hutter,
 T.J., 1976

paleoecology: Baird, G.C., 1971; Carlton,
 D.R., 1975; Hakes, W.G., 1972, 1976;
 Rowell, B.F., 1972; von Bitter, P.H.,
 1972

sedimentary rocks: Bergstrom, R.E., 1953;
 Crouch, M.L., 1971; Cubitt, J.M., 1975;
 Evans, J.K., 1967; Hill, W.E., Jr., 1964;
 Joseph, K.T., 1972; Lane, D.W., 1958;

Lins, T.W., 1950; Mathews, W.L.,
 1978; Minor, J.A., 1969; Perkins, H.C.,
 1952; Prochnow, Suzanne, 1982;

Ronca, L.B., 1959; Rutan, Debra, 1980;
 Schroeder, R.J., 1967; Toomey, D.F.,
 1964; Wainner, K.F., 1939

sedimentary structures: Bower, R.R., 1961

sediments: Holien, C.W., 1982; Schneider,
 H.I., 1976

soils: Merchant, J.W., Jr., 1973; Savage,
 M.E.A., 1961

stratigraphy: Ball, S.M., 1964; Braden,
 W.J., 1958; Brown, W.G., 1958;

Cambridge, T.R., 1959; Dixon, V.R.,
 1960; Eastwood, W.P., 1958; Monger,

- J.W.H., 1961; Newville, H.L., 1958; Patterson, Joseph M., 1933; Sanders, D.T., 1957; Scafe, Don, 1963; Schrott, R.O., 1966; Stephenson, L.G., 1958; Troell, A.R., Jr., 1965; Zandell, C.H., 1963
- structural analysis: Jefferis, L.H., 1970
- vertebrate paleontology: Crum, E.R., 1917; Tway, L.E., 1977, 1982
- Edwards County**
- ground water: Martin, R.B., 1968
- stratigraphy: Courtier, W.H., 1934; Irion, R.L., 1963
- structural analysis: Gerhard, R.G., 1965; Hays, J.K., 1961; Williams, C.D., 1968
- Elk County**
- hydrology: Livingston, N.D., 1981
- invertebrate paleontology: Andersen, R.E., 1974; Brainard, R.H., 1978; Conkin, B.M., 1954; Maerz, R.H., Jr., 1976; Richards, H.G., 1955; Schroeder, M.L., 1961; Spencer, R.S., 1968; Squires, J.M., 1952
- paleobotany: Carter, J.F., 1960; Hutter, T.J., 1976
- paleoecology: Carlton, D.R., 1975; Frost, J.G., 1968; Griesemer, A.D., 1970; Hakes, W.G., 1972; Tash, Paul, 1952
- petroleum: Calvin, D.G., 1963
- sedimentary rocks: Adams, D.J., 1959; Crouch, M.L., 1971; Evans, J.K., 1967; Fullerton, L.B., 1970; Laporte, L.F., 1960; McMillan, N.J., 1955; Pawel, D.T., 1975; Rutan, Debra, 1980; Toomey, D.F., 1964; White, Stanton, 1960; Woody, M.D., 1984
- sedimentary structures: Bower, R.R., 1961
- stratigraphy: Avers, D.D., 1968; Baker, J.M., 1984; Brown, S.S.L., 1966; Cambridge, T.R., 1959; Dorsey, M.T., 1978; Girardot, S.L., 1962; Hattin, D.E., 1954; Lamoreaux, S.B., 1984; Lane, N.G., 1954; McCrone, A.W., 1960; Monger, J.W.H., 1961; Oliver, L.G., 1975; Scafe, Don, 1963; Smith, C.C., 1938; Troell, A.R., Jr., 1965; Underwood, J.O., 1964; Verville, G.J., 1951; Winchell, R.L., 1957; Wolf, G.V., 1984
- vertebrate paleontology: Tway, L.E., 1982
- Ellis County**
- biostratigraphy: Manes, M.L., 1973
- clay mineralogy: Twell, C.F., 1964
- geomorphology: Turner, M.S., 1983
- ground water: Lippert, Veme, 1937; Martin, R.B., 1968; Runyon, H.E., 1936; Turner, P.P., 1983
- igneous rocks: Harrower, K.L., 1976
- invertebrate paleontology: Hattin, D.E., 1952; Loetterle, G.J., 1937
- paleobotany: Thomasson, J.R., 1976
- paleoecology: Archer, A.W., 1983; Hatfield, C.B., 1961; Ho, Tong-Yun, 1964; Stewart, J.D., 1984
- petroleum: Harding, J.E., 1961
- sedimentary rocks: Dubins, I.M., 1947; Stoneburner, R.K., 1982
- sediments: Caprez, L.P., 1974
- soils: Ibrahim, I.K., 1981; Tye, R.V., 1946
- stratigraphy: Bergman, D.W., 1950; Cobban, W.A., 1949; Drees, R.H., 1974; Hostetler, J.M., 1967; Irion, R.L., 1963; McElroy, M.N., 1965; McKellar, T.R., 1962; Miller, H.W., Jr., 1958; Siler, J.C., 1958; Stratton, J.L., 1942
- structural analysis: Carr, D.D., 1958
- vertebrate paleontology: McMullen, T.L., 1974; Tallan, M.E., 1978; Zehr, D.D., 1974
- Ellsworth County**
- clay deposits: Belchic, George, 1915
- ground water: Martin, R.B., 1968
- hydrology: Livingston, N.D., 1981
- invertebrate paleontology: Kay, W.T., 1977; Scott, R.W., 1967
- paleoecology: Hatfield, C.B., 1961; Siemers, C.T., 1971
- petroleum: Walters, R.F., 1945
- popular geology: Nickel, Gerhard, Jr., 1972
- sedimentary rocks: Behairy, Abdel-Kader A., 1972; Berg, J.A., 1981; Hopkins, R.T., 1977; Snyder, D.L., 1963
- sedimentary structures: Mizula, J.W., 1960
- soils: Bhango, M.S., 1956; Naddih, B.I., 1960
- stratigraphy: Bergman, D.W., 1950; Franks, P.C., 1967; McElroy, M.N., 1965; Taylor, M.H., [Jr.], 1947
- structural analysis: Howard, J.R., 1958
- Flinney County**
- biostratigraphy: Manes, M.L., 1973
- ground water: Dabiri, H.E., 1970
- hydrology: Collins, D.N., 1959
- sedimentary rocks: Dubins, I.M., 1947; White, L.M., 1981
- soils: Cipra, J.E., 1970; Dixon, R.M., 1960; Gwin, R.E., 1963; Ibrahim, I.K., 1981
- stratigraphy: Gill, H.W., Jr., 1961; Malone, D.J., 1962; McKellar, T.R., 1962; Worden, J.A., 1959
- structural analysis: Osborn, J.B., 1962
- Ford County**
- hydrology: Collins, D.N., 1959
- invertebrate paleontology: Thompson, T.L., 1965
- paleobotany: Tetrick, M.J., 1979
- paleoecology: Hatfield, C.B., 1961
- soils: Naddih, B.I., 1960
- stratigraphy: Bergman, D.W., 1950; Courtier, W.H., 1934; Malone, D.J., 1962; Renfro, C.A., 1948; Severy, C.L., 1975
- structural analysis: Funk, T.J., 1982; Hays, J.K., 1961; Osborn, J.B., 1962
- Franklin County**
- areal geology: Ball, M.M., 1957; Ball, S.M., 1958; Laughlin, D.J., 1957
- clay mineralogy: Jamkhindikar, S.M., 1969; Watkins, K.N., 1957
- ground water: Vis, B.J., 1981
- invertebrate paleontology: Cocke, J.M., 1970; Grinnell, R.S., Jr., 1958; Jewett, J.M., 1929; Richards, H.G., 1955; Roy, M.B., 1966; Squires, J.M., 1952; Zinser, R.W., 1950
- limestone deposits: Runnels, R.T., 1951
- paleobotany: Carter, J.F., 1960; Hutter, T.J., 1976
- paleoecology: Frost, J.G., 1968; Hakes, W.G., 1972
- phosphate deposits: Randle, R.F., 1949
- sedimentary rocks: Crouch, M.L., 1971; Crowley, D.J., 1966; El-Zouki, A.Y., 1971; Evans, J.K., 1967; Hill, W.E., Jr., 1964; Kahle, C.F., 1962; Minor, J.A., 1969; Rutan, Debra, 1980; Schroeder, R.J., 1967; Schutter, S.R., 1983; Toomey, D.F., 1964; Whitcomb, C.W., 1965
- sedimentary structures: Bower, R.R., 1961; Hall, B.P., 1961
- soils: Kimbrough, C.W., 1978
- stratigraphy: Ball, S.M., 1964; Brown, W.G., 1958; Burchett, R.R., 1959; Dixon, V.R., 1960; Eastwood, W.P., 1958; Monger, J.W.H., 1961; Sanders, D.T., 1957; Troell, A.R., Jr., 1965
- vertebrate paleontology: Tway, L.E., 1982
- Geary County**
- areal geology: Hirsch, J.W., 1966; Ragle, R.C., 1937
- biostratigraphy: Wind, F.H., 1973
- clay mineralogy: Lee, Moon J., 1972; McPherron, D.S., 1956; Watkins, K.N., 1957
- engineering geology: Esmacil-Beik, Siavash, 1979
- geomorphology: Baehr, W.M., 1954
- geophysical surveys: Baysinger, B.L., 1963
- ground water: Moulthrop, J.S., 1963
- hydrology: Field, C.T., 1980; Knapp, H.V., 1980
- invertebrate paleontology: Cuffey, R.J., 1966; Davis, M.E., 1951; Fry, H.C., Jr., 1975; Newton, G.B., 1970; Patengill, M.G., 1964; Simonsen, A.H., 1977
- paleoecology: Griffin, J.R., Jr., 1974; Kues, B.S., 1975
- petroleum: Jackson, William, 1979
- sedimentary rocks: Cubitt, J.M., 1975; Dowling, P.L., Jr., 1967; Drake, L.Y., 1951; Grossnickle, W.E., 1961; Hartig, R.L., 1954; Hinshaw, G.C., 1960; Huber, D.D., 1964; Parish, K.L., 1952; Sphar, J.D., 1965; Stewart, J.W., 1963; Voran, R.L., 1977; Wilbur, R.O., 1956
- sediments: Reimer, L.J., 1975
- soils: Hadimani, A.S., 1967; Johnson, J.L., 1973; Tye, R.V., 1946
- stratigraphy: Bigelow, Nelson, Jr., 1954; Buller, J.V., 1968; Dishman, B.D., 1969; Empie, J.S., 1961; Hattin, D.E., 1954; Snyder, B.L., 1968
- structural analysis: Archer, R.D., 1951; Eccles, K.R., 1980; Koons, D.L., 1956; Lorenzen, D.J., 1973; Stermin, J.E., 1961
- Gove County**
- biostratigraphy: Martin, L.G., 1984
- invertebrate paleontology: Loetterle, G.J., 1937; Thompson, T.L., 1962
- paleoecology: Archer, A.W., 1983; Stewart, J.D., 1984
- petroleum: Irwin, J.S., 1922; Kopper, R.W., 1982
- sedimentary rocks: Yamamoto, S., 1977
- stratigraphy: Miller, H.W., Jr., 1958
- structural analysis: Hays, J.K., 1961; Rohrbough, C.A., 1956; Schierling, E.J., 1968
- Graham County**
- clay mineralogy: Twell, C.F., 1964
- geomorphology: Hoppie, J.R., 1980
- igneous rocks: Harrower, K.L., 1976

- sedimentary rocks: Singh, Gambhir, 1965
stratigraphy: McElroy, M.N., 1965
structural analysis: Parkhurst, R.W., 1959;
Sandlin, G.S., 1957
- Grant County**
sedimentary rocks: Terwilliger-Robertson, S.J., 1983; White, L.M., 1981
soils: Dixon, R.M., 1960; Morin, R.E., 1961
stratigraphy: Gill, H.W., Jr., 1961; Malone, D.J., 1962; Renfro, C.A., 1948; Severy, C.L., 1975; Worden, J.A., 1959
structural analysis: Osborn, J.B., 1962
- Gray County**
hydrology: Collins, D.N., 1959
soils: Morin, R.E., 1961; Naddih, B.L., 1960
stratigraphy: Gill, H.W., Jr., 1961; Malone, D.J., 1962; Renfro, C.A., 1948; Severy, C.L., 1975; Worden, J.A., 1959
structural analysis: Osborn, J.B., 1962
- Greeley County**
environmental geology: Gosch, J.W., 1970
ground water: Yukler, M.A., 1976
petroleum: Putman, B.M., 1960
sedimentary rocks: Abels, T.A., 1958; White, L.M., 1981
soils: Cipra, J.E., 1970; Kaufman, Abraham, 1950
- Greenwood County**
geomorphology: Ham, W.E., 1939
hydrology: Livingston, N.D., 1981
igneous rocks: Adams, J.W., 1959
invertebrate paleontology: Andersen, R.E., 1974; Brainard, R.H., 1978; Conkin, B.M., 1954; Cuffey, R.J., 1966; Delo, D.M., 1928; Edmiston, E.F., 1932; Hanson, John, 1973; Lalicker, C.G., 1932; Maerz, R.H., Jr., 1976; Newton, G.B., 1970; Richards, H.G., 1955; Sawyer, J.F., 1954; Simonsen, A.H., 1977; Spencer, R.S., 1968; Squires, J.M., 1952; Thompson, T.L., 1965; Williams, C.C., 1941
paleobotany: Carter, J.F., 1960; Hutter, T.J., 1976
paleoecology: Carlton, D.R., 1975; Griesemer, A.D., 1970; Hakes, W.G., 1972; Tasch, Paul, 1952
petroleum: Calvin, D.G., 1963; Gould, G.F., 1975
sedimentary rocks: Adams, D.J., 1959; Crouch, M.L., 1971; Erlenwein, S.D., 1978; Evans, J.K., 1967; Fullerton, L.B., 1970; Griffith, G.L., 1981; Hulse, W.J., 1978; Laporte, L.F., 1960; Lardner, J.E., 1984; McMillan, N.J., 1955; Pawel, D.T., 1975; Toomey, D.F., 1964; White, Stanton, 1960; Woody, M.D., 1984
stratigraphy: Avers, D.D., 1968; Bemasek, R.A., 1967; Brown, S.S.L., 1966; Dorsey, M.T., 1978; Hattin, D.E., 1954; Lamoreaux, S.B., 1984; McCrone, A.W., 1960; Monger, J.W.H., 1961; Scafe, Don, 1963; Snyder, B.L., 1968; Troell, A.R., Jr., 1965; Underwood, J.O., 1964; Winchell, R.L., 1957; Zandell, C.H., 1963
structural analysis: Ward, J.R., 1964
vertebrate paleontology: Daly, Eleanor, 1981; Tway, L.E., 1982
- Hamilton County**
geomorphology: Mettler, D.E., 1956
hydrology: Collins, D.N., 1959
invertebrate paleontology: Morrow, A.L., 1931; Worstell, P.J., 1966
petroleum: Putman, B.M., 1960
sedimentary rocks: Abels, T.A., 1958; Dubins, I.M., 1947; White, L.M., 1981
soils: Cipra, J.E., 1970; Dixon, R.M., 1960; Kaufman, Abraham, 1950; Morin, R.E., 1961
stratigraphy: Bergman, D.W., 1950; Cobban, W.A., 1949; Gill, H.W., Jr., 1961; Hostetter, J.M., 1967; King, N.R., 1972; Malone, D.J., 1962; Quinn, A.W., 1927; Worden, J.A., 1959
structural analysis: Osborn, J.B., 1962
- Harper County**
copper ores: Lambert, M.W., 1979
geophysical surveys: Robbins, J.L., 1968
invertebrate paleontology: Thompson, T.L., 1965
petroleum: Calvin, D.G., 1963
sedimentary rocks: Graff, H.J., 1970
stratigraphy: Bradley, W.C., 1961; Swineford, Ada, 1954; Winchell, R.L., 1957
structural analysis: Dwivedi, R.L., 1983; Kelly, T.E., 1961; Williams, C.D., 1968; Wynn, L.L., 1959
- Harvey County**
ground water: Bagheri, Saeed, 1980
sedimentary rocks: Gafford, E.L., Jr., 1965
stratigraphy: Courtier, W.H., 1934; McElroy, M.N., 1965; Swineford, Ada, 1954; Taylor, M.H., [Jr.], 1947
structural analysis: Dwivedi, R.L., 1983; Kelly, T.E., 1961; Tucker, N.A., 1956
zinc ores: Seward, P.A., 1982
- Haskell County**
invertebrate paleontology: Thompson, T.L., 1962, 1965
sedimentary rocks: Abels, T.A., 1958; Terwilliger-Robertson, S.J., 1983
soils: Dixon, R.M., 1960; Morin, R.E., 1961; Travis, D.O., 1965
stratigraphy: Aufmuth, R.E., 1966; Gill, H.W., Jr., 1961; Malone, D.J., 1962; Renfro, C.A., 1948; Severy, C.L., 1975; Worden, J.A., 1959
structural analysis: Osborn, J.B., 1962
- Hodgeman County**
areal geology: Moss, R.G., 1931
biostratigraphy: Manes, M.L., 1973
geochemistry: Broedel, V.J., 1984; Hart, Philip, 1977
ground water: Avis, L.E., 1973
paleobotany: Segal, R.H., 1965; Tetrick, M.J., 1979
paleoecology: Hatfield, C.B., 1961
stratigraphy: Bergman, D.W., 1950; Hostetter, J.M., 1967; Irion, R.L., 1963; Malone, D.J., 1962
structural analysis: Hays, J.K., 1961; Osborn, J.B., 1962
- Jackson County**
areal geology: Beck, H.V., 1955; Davis, S.N., 1951
clay mineralogy: Watkins, K.N., 1957
geophysical surveys: Konig, Michael, 1971
invertebrate paleontology: Grinnell, R.S., Jr., 1958
paleoecology: Peterson, Robert M., 1978
paleogeography: Wells, J.D., 1950
sedimentary rocks: Laporte, L.F., 1960
soils: Hanna, R.M., 1954; Malone, N.J., 1983
stratigraphy: Avers, D.D., 1968; Bemasek, R.A., 1967; Fisher, W.L., 1980; Snyder, B.L., 1968; Stephenson, L.G., 1958
- Jefferson County**
areal geology: Carlson, W.A., 1952; Davis, D.E., 1959; Davis, S.N., 1951; Hirsch, J.W., 1966
engineering geology: Lentell, T.L., 1977
geomorphology: Elks, J.E., 1979; Hoover, W.F., 1932
geophysical surveys: Stelljes, V.D., 1964; Wainwright, K.E., 1960
ground water: Gogel, A.J., 1969; Stone, W.A., 1965
hydrology: Livingston, N.D., 1981; McCauley, J.R., 1977; McCrae, R.O., 1954
invertebrate paleontology: Conkin, B.M., 1954; Farmer, J.D., 1971; Grinnell, R.S., Jr., 1958; Maerz, R.H., Jr., 1976; Richards, H.G., 1955; Spencer, R.S., 1968; Squires, J.M., 1952; Williams, C.C., 1941
paleoecology: Carlton, D.R., 1975; Hakes, W.G., 1976; von Bitter, P.H., 1972
sedimentary rocks: McMillan, N.J., 1955
sediments: Schneider, H.L., 1976
soils: Woodring, S.M., 1973
stratigraphy: Brown, W.G., 1958; Burchett, R.R., 1959; Cambridge, T.R., 1959; Monger, J.W.H., 1961
structural analysis: Callen, J.M., 1983
vertebrate paleontology: Tway, L.E., 1977
- Jewell County**
invertebrate paleontology: Griffith, J.H., 1947; Hattin, D.E., 1952; Morrow, A.L., 1931
paleoecology: Ho, Tong-Yun, 1964
sedimentary rocks: Dubins, I.M., 1947
sediments: Metz, H.L., 1954
soils: Badgley, W.A., 1957
stratigraphy: Bergman, D.W., 1950; Hostetter, J.M., 1967; McKellar, T.R., 1962
structural analysis: Ansari, N.W., 1965
- Johnson County**
areal geology: Dufford, A.E., 1953
engineering geology: Larimore, R.E., 1978
enhanced recovery: Kharrat, Riyaz, 1984
geomorphology: Elks, J.E., 1979; Hoover, W.F., 1932; Simms, J.J., 1975
igneous rocks: Adams, J.W., 1959
invertebrate paleontology: Baesemann, J.F., 1971; Cocke, J.M., 1970; Grinnell, R.S., Jr., 1958; Jewett, J.M., 1929; Roy, M.B., 1966; Squires, J.M., 1952; Welch, R.G., 1964; Zinsler, R.W., 1950
sedimentary rocks: Crowley, D.J., 1966; Cubitt, J.M., 1975; El-Zouki, A.Y., 1971; Kahle, C.F., 1962; Kidder, D.L., 1982; Prochnow, Suzanne, 1982; Schroeder, R.J., 1967; Schutter, S.R., 1983; Verhulst, A.T., 1970; Whitcomb, C.W., 1965
sedimentary structures: Hall, B.P., 1961
sediments: Holien, C.W., 1982

- stratigraphy: Ball, S.M., 1964; Brown, W.G., 1958; Burchett, R.R., 1959; Eastwood, W.P., 1958; Lamerson, P.R., 1956; Newell, N.D., 1931; Wilson, J. A., 1959
- Kearny County**
hydrology: Collins, D.N., 1959
invertebrate paleontology: Morrow, A.L., 1931
sedimentary rocks: Abels, T.A., 1958; White, L.M., 1981
soils: Cipra, J.E., 1970; Dixon, R.M., 1960
stratigraphy: Bergman, D.W., 1950; Gill, H.W., Jr., 1961; Malone, D.J., 1962; Worden, J.A., 1959
structural analysis: Osborn, J.B., 1962
- Kingman County**
ground water: Martin, R.B., 1968
sedimentary rocks: Graff, H.J., 1970
soils: Thorp, F.C., 1954
stratigraphy: Courtier, W.H., 1934; McElroy, M.N., 1965; Swineford, Ada, 1954; Winchell, R.L., 1957
structural analysis: Dwivedi, R.L., 1983; Kelly, T.E., 1961; Lippert, R.H., 1964; Steele, A.D., 1982; Williams, C.D., 1968; Wynn, L.L., 1959
zinc ores: Seward, P.A., 1982
- Kiowa County**
biostratigraphy: Cooper, W.W., 1967
ground water: Martin, R.B., 1968
invertebrate paleontology: Scott, R.W., 1967
sedimentary rocks: Fisher, R.D., 1977; King, G.E., 1972
stratigraphy: Courtier, W.H., 1934; Malone, D.J., 1962; Priest, Tim, 1982; Swineford, Ada, 1954
structural analysis: Clark, S.B., 1974; Gerhard, R.G., 1965; Williams, C.D., 1968
well-logging: Bornemann, Erhard, 1979
- Labette County**
clay mineralogy: Tien, Pei-lin, 1973
environmental geology: Tippie, J.W., 1974
igneous rocks: Adams, J.W., 1959
invertebrate paleontology: Laukel, Q.C., 1956; Spencer, R.S., 1968
paleoecology: Frost, J.G., 1968; Mathewson, J.E., 1977
petroleum: Calvin, D.G., 1963; Gould, G.F., 1975; Schlinsog, D.G., 1982
phosphate deposits: Randle, R.F., 1949
sedimentary rocks: Adams, D.J., 1959; Aden, L.J., 1982; Hambleton, W.W., 1951; Inden, R.F., 1968; Kidder, D.L., 1982; Railsback, L.B., 1983; Schenk, P.E., 1963; Schroeder, R.J., 1967; Schutter, S.R., 1983; Woody, M.D., 1984
sedimentary structures: Hall, B.P., 1961; Perkins, T.W., 1974
soils: Bhango, M.S., 1956; Swanson, W.A., 1953
stratigraphy: Abemathy, G.E., 1936; Emery, P.A., 1962; Harris, J.W., 1984; Howe, W.B., 1954; Jewett, J.M., 1943; Jungmann, W.L., 1964; Lemmons, J.E., 1946; Mossler, J.H., 1970; Price, R.C., 1981; Ravn, R.L., 1981; Singler, C.R., 1965; Stobbe, W.J., 1971
structural analysis: Osborn, J.B., 1962
- Lane County**
areal geology: Prescott, G.C., Jr., 1950
ground water: Yukler, M.A., 1976
invertebrate paleontology: Thompson, T.L., 1962, 1965
sedimentary rocks: Dubins, I.M., 1947
soils: Kaufman, Abraham, 1950
structural analysis: Hays, J.K., 1961
well-logging: Canard, C.R., 1966
- Leavenworth County**
areal geology: Dufford, A.E., 1953; McLaren, D.B., 1958; Reynolds, J.R., 1957
clay mineralogy: Jamkhindikar, S.M., 1969
construction materials: Dilley, C.A., 1931
geomorphology: Baldwin, A.D., Jr., 1963; Hoover, W.F., 1932
hydrology: Alexander, J.P., 1978
invertebrate paleontology: Brainard, R.H., 1978; Cocke, J.M., 1970; Delo, D.M., 1928; Grinnell, R.S., Jr., 1958; Jewett, J.M., 1929; Richards, H.G., 1955; Roy, M.B., 1966; Squires, J.M., 1952
limestone deposits: Runnels, R.T., 1951
paleobotany: Carter, J.F., 1960; Hutter, T.J., 1976
paleoecology: Hakes, W.G., 1976
sedimentary rocks: Bergstrom, R.E., 1953; Crouch, M.L., 1971; Crowley, D.J., 1966; Evans, J.K., 1967; Hill, W.E., Jr., 1964; Lins, T.W., 1950; Mathews, W.L., 1978; Minor, J.A., 1969; Rutan, Debra, 1980; Schutter, S.R., 1983; Toomey, D.F., 1964
sedimentary structures: Bower, R.R., 1961
sediments: Holien, C.W., 1982
soils: Kaufman, Abraham, 1950; Kimbrough, C.W., 1978; Kuzila, M.S., 1976
stratigraphy: Ball, S.M., 1964; Burchett, R.R., 1959; Dixon, V.R., 1960; Eastwood, W.P., 1958; Monger, J.W.H., 1961; Patterson, Joseph M., 1933; Sanders, D.T., 1957; Troell, A.R., Jr., 1965; Wilson, J. A., 1959
structural analysis: Callen, J.M., 1983
vertebrate paleontology: Crum, E.R., 1917; Tway, L.E., 1982
- Lincoln County**
geomorphology: Cline, R.L., 1974
ground water: Martin, R.B., 1968
paleoecology: Hatfield, C.B., 1961; Siemers, C.T., 1971
petroleum: Harding, J.E., 1961
popular geology: Nickel, Gerhard, Jr., 1972
sedimentary rocks: Al-arabi, N.A., 1971
stratigraphy: Bergman, D.W., 1950; Cobban, W.A., 1949; Franks, P.C., 1967
- Linn County**
coal deposits: Cobb, J.C., 1981
diagenesis: Nollsch, D.A., 1983
environmental geology: Wagner, Jan, 1976
hydrology: Alexander, J.P., 1978
invertebrate paleontology: Baesemann, J.F., 1971; Cocke, J.M., 1970; Grinnell, R.S., Jr., 1958; Laukel, Q.C., 1956; Qandil, Yacoub, 1961; Squires, J.M., 1952
limestone deposits: Runnels, R.T., 1951
- paleoecology: Frost, J.G., 1968
sedimentary rocks: El-Zouki, A.Y., 1971; Kidder, D.L., 1982; Lawson, R.W., 1953; Muhs, D.R., 1979; Railsback, L.B., 1983; Schenk, P.E., 1963; Schroeder, R.J., 1967; Underwood, M.R., 1984; Woody, M.D., 1984
sedimentary structures: Hall, B.P., 1961
stratigraphy: Hatcher, D.A., 1961; Jewett, J.M., 1943; Lamerson, P.R., 1956; Lemmons, J.E., 1946; Machovec, M.A., 1963; Mossler, J.H., 1970; Price, R.C., 1981; Ravn, R.L., 1981; Singler, C.R., 1965
structural analysis: Padgham, J.B., 1957
- Logan County**
areal geology: Johnson, C.R., 1956
biostratigraphy: Martin, L.G., 1984
hydrology: Alexander, J.P., 1978
invertebrate paleontology: Loetterle, G.J., 1937; Thompson, T.L., 1962, 1965
paleobotany: Segal, R.H., 1965
paleoecology: Archer, A.W., 1983; Lammons, J.M., 1969; Stewart, J.D., 1984
petroleum: Irwin, J.S., 1922
sedimentary rocks: Abels, T.A., 1958; Yamamoto, S., 1977
soils: Davis, R.D., 1962; Naddih, B.I., 1960
stratigraphy: Bergstresser, T.J., 1981; Miller, H.W., Jr., 1958
structural analysis: Rohrbough, C.A., 1956
- Lyon County**
environmental geology: True, M.L.K., 1969
invertebrate paleontology: Cuffey, R.J., 1966; Edmiston, E.F., 1932; Fry, H.C., Jr., 1975; Mathews, J.L., 1959; Newton, G.B., 1970; Perlmutter, Barry, 1971; Simonsen, A.H., 1977; Spencer, R.S., 1968
paleoecology: Tasch, Paul, 1952
paleogeography: Wells, J.D., 1950
sedimentary rocks: Cubitt, J.M., 1975; Lardner, J.E., 1984; McMillan, N.J., 1955; Ross, D.A., 1960; Wahrhaftig, Leon, 1952; Wilbur, R.O., 1956
sediments: Schneider, H.I., 1976
stratigraphy: Avers, D.D., 1968; Bernasek, R.A., 1967; Dishman, B.D., 1969; Dorsey, M.T., 1978; Empie, J.S., 1961; Garber, M.S., 1962; Gilmore, John B., 1972; Girardot, S.L., 1962; McCrone, A.W., 1960; Mendoza, H.A., 1959; Owen, D.E., 1959; SeEVERS, W.J., 1960; Snyder, B.L., 1968; Underwood, J.O., 1964; Wood, R.L., 1959
- Marion County**
clay mineralogy: Bryson, W.R., 1959; Watkins, K.N., 1957
environmental geology: True, M.L.K., 1969
geophysical surveys: Noah, C.G., 1956
hydrology: Livingston, N.D., 1981
invertebrate paleontology: Edmiston, E.F., 1932; Lalicker, C.G., 1932; Pattengill, M.G., 1964; Scott, R.W., 1967; Stude, J.R., 1961
paleobotany: Young, C.R., 1969
paleoecology: Kues, B.S., 1975
petroleum: Jackson, William, 1979

- sedimentary rocks: Grossnickle, W.E., 1961; Hinshaw, G.C., 1960; Wilbur, R.O., 1956
- stratigraphy: Franks, P.C., 1967; Russell, J.L., 1967; Swineford, Ada, 1954; Taylor, M.H., [Jr.], 1947
- structural analysis: Brown, Alton R., 1959; Butler, J.B., 1960; Ward, J.R., 1964 zinc ores: Seward, P.A., 1982
- Marshall County**
- environmental geology: Weinzierl, E.J., 1968
- gypsum deposits: Fairchild, P.W., 1949
- hydrology: McCauley, J.R., 1977
- invertebrate paleontology: Cuffey, R.J., 1966; Fry, H.C., Jr., 1975; Garihan, A.B.L., 1973; Newton, G.B., 1970; Simonsen, A.H., 1977; Spencer, R.S., 1968
- paleoecology: Kues, B.S., 1975; Peterson, Robert M., 1978
- sedimentary rocks: Karl, H.A., 1971; Laporte, L.F., 1960; Voran, R.L., 1977
- sediments: Schneider, H.I., 1976
- stratigraphy: Avers, D.D., 1968; Bernasek, R.A., 1967; Buller, J.V., 1968; Dishman, B.D., 1969; Fisher, W.L., 1980; Hattin, D.E., 1954; Kraemer, J.L., 1934; McCrone, A.W., 1960; Snyder, B.L., 1968
- structural analysis: Lorenzen, D.J., 1973; Nelson, P.D., 1952
- surficial deposits: Lill, G.G., 1946
- McPherson County**
- environmental geology: True, M.L.K., 1969
- invertebrate paleontology: Scott, R.W., 1967
- popular geology: Nickel, Gerhard, Jr., 1972
- soils: Naddih, B.I., 1960
- stratigraphy: Courtier, W.H., 1934; Franks, P.C., 1967; McElroy, M.N., 1965; Semken, H.A., Jr., 1965; Swineford, Ada, 1954; Taylor, M.H., [Jr.], 1947
- structural analysis: Hylton, G.K., 1960; Olson, D.R., 1956; Thatcher, R.J., 1961 zinc ores: Seward, P.A., 1982
- Meade County**
- areal geology: Schultz, G.E., 1966; Stevens, J.B., 1963; Woodburne, M.O., 1960
- geochronology: Boellstorff, J.D., 1973
- ground water: Ellithorpe, H.F., 1933
- hydrology: Alexander, J.P., 1978
- invertebrate paleontology: Devore, C.H., 1974; Gutentag, E.D., 1958; Miller, B.B., 1960, 1963; Simon, P.R., 1977
- paleobotany: Segal, R.H., 1965
- paleoecology: Ho, Tong-Yun, 1964
- sedimentary rocks: Baab, Patricia, 1981; Franz, R.H., 1984
- sediments: Rebertus, D.G., 1972
- soils: Naddih, B.I., 1960
- stratigraphy: Davis, L.C., 1975; Gill, H.W., Jr., 1961; Kovach, J.T., 1979; Malone, D.J., 1962; McManus, D.A., 1959; Renfroe, C.A., 1948; Severy, C.L., 1975; Spicer, S.R., 1975; Swineford, Ada, 1954; Worden, J.A., 1959
- structural analysis: Osborn, J.B., 1962
- vertebrate paleontology: Hibbard, C.W., 1941; Paulson, G.R., 1960
- Miami County**
- diagenesis: Nollsch, D.A., 1983
- environmental geology: Wagner, Jan, 1976
- geophysical surveys: Vargas, J.F., 1984
- hydrology: Alexander, J.P., 1978
- igneous rocks: Adams, J.W., 1959
- invertebrate paleontology: Cocke, J.M., 1970; Grinnell, R.S., Jr., 1958; Welch, R.G., 1964; Zinser, R.W., 1950
- limestone deposits: Runnels, R.T., 1951
- paleoecology: Frost, J.G., 1968
- sedimentary rocks: Crowley, D.J., 1966; El-Zouki, A.Y., 1971; Lawson, R.W., 1953; Mitchell, J.C., 1981; Muhs, D.R., 1979; Railsback, L.B., 1983; Schroeder, R.J., 1967; Schutter, S.R., 1983
- sedimentary structures: Hall, B.P., 1961
- stratigraphy: Burchett, R.R., 1959; Hatcher, D.A., 1961; Lamerson, P.R., 1956; Miller, D.E., 1963; Mossler, J.H., 1970; Singler, C.R., 1965
- Mitchell County**
- areal geology: Hodson, W.G., 1956
- geomorphology: Hoppie, J.R., 1980
- ground water: Martin, R.B., 1968
- invertebrate paleontology: Crick, R.E., 1976; Hattin, D.E., 1952; Worstell, P.J., 1966
- paleoecology: Hatfield, C.B., 1961
- sedimentary structures: Mizula, J.W., 1960
- soils: Dixon, R.M., 1960
- stratigraphy: Bergman, D.W., 1950; Cobban, W.A., 1949; Franks, P.C., 1967; Hostetler, J.M., 1967; McElroy, M.N., 1965; McKellar, T.R., 1962; Taylor, M.H., [Jr.], 1947
- structural analysis: Ansari, N.W., 1965
- Montgomery County**
- clay mineralogy: Kinell, C.B., III, 1964
- construction materials: Dilley, C.A., 1931
- engineering geology: Esmacil-Beik, Siavash, 1979
- geomorphology: Ham, W.E., 1939
- hydrology: Field, C.T., 1980; Knapp, H.V., 1980
- igneous rocks: Adams, J.W., 1959
- invertebrate paleontology: Cocke, J.M., 1970; Jacques, T.E., 1964; Jewett, J.M., 1929; Laukel, Q.C., 1956; Squires, J.M., 1952
- paleoecology: Brondos, M.D., 1983; Frost, J.G., 1968; Wood, R.H., II, 1977
- petroleum: Benson, D.L., 1923; Calvin, D.G., 1963; Gould, G.F., 1975; Schlinsog, D.G., 1982
- sedimentary rocks: Kidder, D.L., 1982; Malinky, J.M., 1980; Mitchell, J.C., 1981; Moussavi-Harami, Reza, 1980; Muhs, D.R., 1979; Railsback, L.B., 1983; Schroeder, R.J., 1967; Schutter, S.R., 1983; Stone, W.P., Jr., 1979; White, S.M., 1960; Wilson, F.W., 1957; Woody, M.D., 1984
- sedimentary structures: Hall, B.P., 1961
- stratigraphy: Ball, S.M., 1964; Brown, W.G., 1958; Davis, J.R., 1939; Eastwood, W.P., 1958; Emery, P.A., 1962; Haggiagi, M.A., 1970; Jewett, J.M., 1943; Schulte, G.S., 1958; Stobbe, W.J., 1971; Winchell, R.L., 1957
- Morris County**
- clay mineralogy: Bryson, W.R., 1959
- environmental geology: Macfarlane, P.A., 1979; True, M.L.K., 1969
- hydrology: Livingston, N.D., 1981
- invertebrate paleontology: Cuffey, R.J., 1966; Davis, M.E., 1951; Edmiston, E.F., 1932; Fry, H.C., Jr., 1975; Newton, G.B., 1970; Pattengill, M.G., 1964; Simonsen, A.H., 1977; Spencer, R.S., 1968
- paleoecology: Kues, B.S., 1975
- paleogeography: Wells, J.D., 1950
- petroleum: Jackson, William, 1979
- sedimentary rocks: Grossnickle, W.E., 1961; Hinshaw, G.C., 1960; Laporte, L.F., 1960
- stratigraphy: Avers, D.D., 1968; Buller, J.V., 1968; Dishman, B.D., 1969; Empie, J.S., 1961; Hattin, D.E., 1954; McCrone, A.W., 1960; Snyder, B.L., 1968; Taylor, M.H., [Jr.], 1947
- structural analysis: Koons, D.L., 1956; Stemin, J.E., 1961
- Morton County**
- sedimentary rocks: Abdullah, T.Y., 1983; Abels, T.A., 1958; Franz, R.H., 1984; White, L.M., 1981
- soils: Cipra, J.E., 1970
- stratigraphy: Gill, H.W., Jr., 1961; Malone, D.J., 1962; Renfroe, C.A., 1948; Severy, C.L., 1975; Taylor, G.L., 1931; Worden, J.A., 1959
- structural analysis: Osborn, J.B., 1962; Strunk, P.M., 1958
- Nemaha County**
- hydrology: Alexander, J.P., 1978
- igneous rocks: Adams, J.W., 1959
- invertebrate paleontology: Cuffey, R.J., 1966; Davis, M.E., 1951; Fry, H.C., Jr., 1975; Newton, G.B., 1970; Spencer, R.S., 1968
- paleogeography: Wells, J.D., 1950
- sedimentary rocks: Laporte, L.F., 1960
- soils: Hanna, R.M., 1954; Kaufman, Abraham, 1950
- stratigraphy: Avers, D.D., 1968; Bernasek, R.A., 1967; Fisher, W.L., 1980; Snyder, B.L., 1968; Stephenson, L.G., 1958
- structural analysis: DuBois, S.M., 1978; Koons, D.L., 1956; Stander, T.W., 1981
- Neosho County**
- construction materials: Dilley, C.A., 1931
- diagenesis: Nollsch, D.A., 1983
- igneous rocks: Adams, J.W., 1959
- invertebrate paleontology: Cocke, J.M., 1970; Jewett, J.M., 1929; Laukel, Q.C., 1956
- limestone deposits: Runnels, R.T., 1951
- paleoecology: Frost, J.G., 1968
- petroleum: Calvin, D.G., 1963; Gould, G.F., 1975; Schlinsog, D.G., 1982
- sedimentary rocks: Adams, D.J., 1959; Cubitt, J.M., 1975; Dawson, W.C., 1984; Kidder, D.L., 1982; Lawson, R.W., 1953; Mitchell, J.C., 1981; Muhs, D.R., 1979; Railsback, L.B., 1983; Schenk, P.E., 1963; Schroeder, R.J., 1967; Schutter, S.R., 1983; Woody, M.D., 1984
- sedimentary structures: Hall, B.P., 1961
- soils: Bhango, M.S., 1956

- stratigraphy: Emery, P.A., 1962; Haggiagi, M.A., 1970; Jewett, J.M., 1943; Lemmons, J.E., 1946; Mossler, J.H., 1970; Ravn, R.L., 1981; Schulte, G.S., 1958; Singler, C.R., 1965; Stobbe, W.J., 1971
- structural analysis: Osborn, J.B., 1962
- Ness County**
- areal geology: Moss, R.G., 1931
- clay mineralogy: Twell, C.F., 1964
- geochemistry: Hart, Philip, 1977; Nicastro, L.J., 1983
- ground water: Avis, L.E., 1973; Pollock, L.[M.], 1982
- hydrology: Alexander, J.P., 1978
- invertebrate paleontology: Loetterle, G.J., 1937; Thompson, T.L., 1962, 1965
- sedimentary rocks: Bieber, D.W., 1984; Dubins, I.M., 1947; Stoneburner, R.K., 1982
- stratigraphy: Bergman, D.W., 1950; Hostetler, J.M., 1967; Irion, R.L., 1963; McKellar, T.R., 1962; Stratton, J.L., 1942
- structural analysis: Hays, J.K., 1961
- Norton County**
- geomorphology: Hoppie, J.R., 1980
- igneous rocks: Harrower, K.L., 1976
- paleoecology: Lammons, J.M., 1969
- sediments: Metz, H.L., 1954
- soils: Badgley, W.A., 1957
- stratigraphy: Bennett, D.K., 1984; McElroy, M.N., 1965
- structural analysis: Parkhurst, R.W., 1959; Tibbetts, B.L., 1958
- Osage County**
- areal geology: Hirsch, J.W., 1966
- clay mineralogy: Watkins, K.N., 1957
- coal deposits: Hartsock, D.L., 1970
- hydrology: Alexander, J.P., 1978; Livingston, N.D., 1981
- igneous rocks: Adams, J.W., 1959
- invertebrate paleontology: Andersen, R.E., 1974; Conkin, B.M., 1954; Grinnell, R.S., Jr., 1958; Maerz, R.H., Jr., 1976; Perlmutter, Barry, 1971; Richards, H.G., 1955; Williams, C.C., 1941
- limestone deposits: Rumlens, R.T., 1951
- paleoecology: Carlton, D.R., 1975; Hakes, W.G., 1972
- sedimentary rocks: Crouch, M.L., 1971; Cubitt, J.M., 1975; Evans, J.K., 1967; Hill, W.E., Jr., 1964; Mathews, W.L., 1978; McMillan, N.J., 1955; Perkins, H.C., 1952; Ross, D.A., 1960; Schroeder, R.J., 1967; Wahrhaftig, Leon, 1952
- sediments: Schneider, H.I., 1976
- stratigraphy: Cambridge, T.R., 1959; Dixon, V.R., 1960; Dorsey, M.T., 1978; Gilmore, John B., 1972; Girardot, S.L., 1962; Mendoza, H.A., 1959; Monger, J.W.H., 1961; Owen, D.E., 1959; Scafe, Don, 1963; SeEVERS, W.J., 1960; Stephenson, L.G., 1958; Wood, R.L., 1959; Zandell, C.H., 1963
- vertebrate paleontology: Tway, L.E., 1982
- Osborne County**
- biostratigraphy: Manes, M.L., 1973
- geomorphology: Hoppie, J.R., 1980
- ground water: Martin, R.B., 1968
- hydrology: Alexander, J.P., 1978
- igneous rocks: Harrower, K.L., 1976
- invertebrate paleontology: Crick, R.E., 1976; Hattin, D.E., 1952; Worstell, P.J., 1966
- petroleum: Harding, J.E., 1961
- sedimentary rocks: Dubins, I.M., 1947
- soils: Dixon, R.M., 1960; Travis, D.O., 1965
- stratigraphy: Bergman, D.W., 1950; Cobban, W.A., 1949; Hostetler, J.M., 1967; McElroy, M.N., 1965; McKellar, T.R., 1962
- structural analysis: Ansari, N.W., 1965
- Ottawa County**
- areal geology: Mack, L.E., 1959
- clay deposits: Belchic, George, 1915
- geomorphology: Hoppie, J.R., 1980
- invertebrate paleontology: Scott, R.W., 1967
- sedimentary structures: Mizula, J.W., 1960
- stratigraphy: Bergman, D.W., 1950; Franks, P.C., 1967; Seiler, C.D., 1951; Taylor, M.H., [Jr.], 1947
- Pawnee County**
- geochemistry: Hart, Philip, 1977
- ground water: Avis, L.E., 1973; Martin, R.B., 1968
- petroleum: Redman, K.G., 1947
- stratigraphy: Bergman, D.W., 1950; Courtier, W.H., 1934; Irion, R.L., 1963
- structural analysis: Arnett, B.A., 1974; Hays, J.K., 1961; Myers, R.E., 1959; Shapley, R.A., 1956
- Phillips County**
- geomorphology: Hoppie, J.R., 1980
- hydrology: Alexander, J.P., 1978
- igneous rocks: Harrower, K.L., 1976
- paleobotany: Segal, R.H., 1965
- paleoecology: Ho, Tong-Yun, 1964; Lammons, J.M., 1969; Stewart, J.D., 1984
- sedimentary rocks: Dubins, I.M., 1947
- sediments: Metz, H.L., 1954
- soils: Badgley, W.A., 1957
- stratigraphy: Bennett, D.K., 1984; McElroy, M.N., 1965; Miller, H.W., Jr., 1958
- structural analysis: Herman, C.W., 1957; Parkhurst, R.W., 1959
- Pottawatomie County**
- areal geology: Beck, H.V., 1955
- clay mineralogy: Hargadine, G.D., 1959; Lee, Moon J., 1972
- environmental geology: Bock, B.R., 1973; Knight, C.W., 1971; Terry, R.V., 1979; Webb, R.M., 1962; Weinzierl, E.J., 1968
- geochemistry: Switek, John, 1977
- geomorphology: Ardell, R.J., 1965; Fish, M.C., 1953; Hoover, W.F., 1932; Ratzlaff, J.R., 1970
- geophysical surveys: Konig, Michael, 1971
- ground water: Gilliland, W.J., 1973; Smith, James T., 1959
- hydrology: Alexander, J.P., 1978; Gregory, J.L., 1967; McCauley, J.R., 1977
- invertebrate paleontology: Bender, M.J., 1951; Cuffey, R.J., 1966; Davis, M.E., 1951; Fry, H.C., Jr., 1975; Garihan, A.B.L., 1973; Grinnell, R.S., Jr., 1958; Newton, G.B., 1970; Schmidt, Winfried, 1974; Simonsen, A.H., 1977; Sloan, K.W., 1963; Spencer, R.S., 1968; Wells, Dana, 1929; Williams, C.C., 1941
- paleoecology: Kues, B.S., 1975; Peterson, Robert M., 1978; Tarkington, D.K., 1977; Yarrow, G.R., 1974
- paleogeography: Wells, J.D., 1950
- petroleum: Jackson, William, 1979
- sedimentary rocks: Dowling, P.L., Jr., 1967; Drake, L.Y., 1951; Huber, D.D., 1964; Laporte, L.F., 1960; Parish, K.L., 1952; Stewart, J.W., 1963; Twiss, P.C., 1955; Voran, R.L., 1977; Voss, J.D., 1972; Wilbur, R.O., 1956
- sediments: Snow, D.L., 1963
- soils: Hadimani, A.S., 1967; Mueller, R.G., 1982
- stratigraphy: Avers, D.D., 1968; Bernasek, R.A., 1967; Buller, J.V., 1968; Dishman, B.D., 1969; Fisher, W.L., 1980; Girardot, S.L., 1962; Harding, K.S., 1951; Hattin, D.E., 1954; Kraemer, J.L., 1934; Renfro, A.R., 1963; Seiler, C.D., 1951; Snyder, B.L., 1968; Stephenson, L.G., 1958; Taylor, M.H., [Jr.], 1947
- structural analysis: Koons, D.L., 1956; Lorenzen, D.J., 1973; Ratcliff, G.A., 1957; Seyrafian, Ali, 1978
- Pratt County**
- ground water: Martin, R.B., 1968
- sedimentary rocks: St. Clair, P.N., 1982
- stratigraphy: Courtier, W.H., 1934; McElroy, M.N., 1965; Priest, Tim, 1982
- structural analysis: Briggeman, H.W., 1959; Dwivedi, R.L., 1983; Gerhard, R.G., 1965; Kelly, T.E., 1961; Lippert, R.H., 1964; Muehlhauser, H.C., 1958; Steele, A.D., 1982; Williams, C.D., 1968
- well-logging: Bomemann, Erhard, 1979
- Rawlins County**
- clay mineralogy: Twell, C.F., 1964
- paleobotany: Segal, R.H., 1965
- paleoecology: Lammons, J.M., 1969
- soils: Travis, D.O., 1970
- stratigraphy: Cobban, W.A., 1949; Hockens, S.N., 1959; McElroy, M.N., 1965; McMurray, K.S., 1962; Walton, R.G., 1960
- structural analysis: Ben Omran, Abdelmoneim, 1972; Mehl, R.L., 1959; Rohrbough, C.A., 1956
- well-logging: Canard, C.R., 1966
- Reno County**
- engineering geology: Snyder, J.D., 1960
- environmental geology: Gosch, J.W., 1970
- geomorphology: Ham, W.E., 1939
- ground water: Martin, R.B., 1968
- paleoecology: Ho, Tong-Yun, 1964
- salt deposits: Cowan, D.W., 1940
- sedimentary rocks: Graff, H.J., 1970
- stratigraphy: Courtier, W.H., 1934; McElroy, M.N., 1965; Swineford, Ada, 1954; Taylor, M.H., [Jr.], 1947
- structural analysis: Dwivedi, R.L., 1983; Kelly, T.E., 1961; Lippert, R.H., 1964; Ricci, A.T., 1955; Williams, C.D., 1968
- zinc ores: Seward, P.A., 1982

Republic County

invertebrate paleontology: Griffith, J.H., 1947; Morrow, A.L., 1931
 sedimentary structures: Mizula, J.W., 1960
 sediments: Metz, H.L., 1954
 soils: Badgley, W.A., 1957
 stratigraphy: Bergman, D.W., 1950; Cobban, W.A., 1949; Eshelman, R.E., 1974; Franks, P.C., 1967

Rice County

clay mineralogy: Twell, C.F., 1964
 engineering geology: Snyder, J.D., 1960
 geomorphology: Stewart, G.F., 1973
 ground water: Martin, R.B., 1968
 invertebrate paleontology: Scott, R.W., 1967
 petroleum: Amstutz, P.T., Jr., 1943
 salt deposits: Holdoway, K.A., 1972; Horner, R.M., 1914; Lomenick, T.F., 1968
 sedimentary rocks: Glossa, J.M., 1982
 soils: Hawando, Tamiric, 1978
 stratigraphy: Courtier, W.H., 1934; Franks, P.C., 1967; McElroy, M.N., 1965; Swineford, Ada, 1954; Taylor, M.H., [Jr.], 1947
 structural analysis: Ehm, A.E., 1965; Gould, J.G., 1952; Hylton, G.K., 1960; Nicholas, R.H., 1954; Steele, A.D., 1982
 zinc ores: Seward, P.A., 1982

Riley County

areal geology: Barrett, W.J., 1958; Hirsch, J.W., 1966; Mendenhall, R.A., 1958; Ragle, R.C., 1937
 biostratigraphy: Wind, F.H., 1973
 clay mineralogy: Asmussen, L.E., 1958; Bryson, W.R., 1959; Dulekoz, Erhan, 1969; Hargadine, G.D., 1959; McPherron, D.S., 1956; Stindl, Heribert, 1966
 environmental geology: Gosch, J.W., 1970; Hall, R.A., 1979; Knight, C.W., 1971; Shanklin, G.P., 1980; Webb, R.M., 1962; Weinzierl, E.J., 1968
 geomorphology: Baehr, W.M., 1954; Fish, M.C., 1953; Hoover, W.F., 1932
 geophysical surveys: Baysinger, B.L., 1963; Dowell, A.R., 1964; Mathias, K.E., 1972
 ground water: Moulthrop, J.S., 1963; Smith, James T., 1959; Steeples, D.W., 1970
 hydrology: Green, Mary M., 1949; Gregory, J.L., 1967; Livingston, N.D., 1981; McCauley, J.R., 1977
 igneous rocks: Bridge, T.E., 1953; Dyer, R.G., 1970; Eastwood, R.L., 1965; Hanson, C.G., 1980; McDermott, V.J., 1967; Rosa, Felipe, 1966; Woods, M.J., 1970
 invertebrate paleontology: Clark, W.K., 1950; Cuffey, R.J., 1966; Davis, M.E., 1951; Ehret, A.L., Jr., 1961; Fry, H.C., Jr., 1975; Grinnell, R.S., Jr., 1958; Little, J.M., 1965; Matthews, J.L., 1959; Newton, G.B., 1970; Pattengill, M.G., 1964; Reider, E.R., 1952; Sawyer, J.F., 1954; Schmidt, Winfried, 1974; Simonsen, A.H., 1977; Sloan, K.W., 1963; Spencer, R.S., 1968; Truxell, R.E., 1951; Wells, Dana, 1929
 paleobotany: Barker, G.W., 1983;

Schaeffer, K.M.M., 1960

paleoecology: Griffin, J.R., Jr., 1974; Kues, B.S., 1975; Tarkington, D.K., 1977; Yarrow, G.R., 1974
 paleogeography: Wells, J.D., 1950
 petroleum: Jackson, William, 1979
 sedimentary rocks: Cubitt, J.M., 1975; Dowling, P.L., Jr., 1967; Drake, L.Y., 1951; Hartig, R.L., 1954; Huber, D.D., 1964; Johnson, W.B., 1949; Laporte, L.F., 1960; Miller, R. E., 1963; Parish, K.L., 1952; Stewart, J.W., 1963; Twiss, P.C., 1955; Voran, R.L., 1977; Waterman, W.D., 1951; Wilbur, R.O., 1956
 sedimentary structures: Hooker, R.A., 1956
 sediments: Crumpton, C.F., 1951; Holcombe, W.B., 1957; Husain, Athar, 1964
 soils: Adams, R.S., Jr., 1959; Bhango, M.S., 1956; Hamed, C.H., 1940; Schimel, D.S., 1982; Thorp, F.C., 1954; Travis, D.O., 1970; Tye, R.V., 1946; Wyrill, J.B., III, 1971
 stratigraphy: Avers, D.D., 1968; Beck, H.V., 1949; Bigelow, Nelson, Jr., 1954; Buller, J.V., 1968; Dishman, B.D., 1969; Empie, J.S., 1961; Fisher, W.L., 1980; Harding, K.S., 1951; Hattin, D.E., 1954; Kraemer, J.L., 1934; McCrone, A.W., 1960; Mudge, M.R., 1949; Renfro, A.R., 1963; Seiler, C.D., 1951; Snyder, B.L., 1968; Taylor, M.H., [Jr.], 1947
 structural analysis: Archer, R.D., 1951; Bruton, R.L., 1958; Coombs, V.B., 1948; Eccles, K.R., 1980; Gasaway, M.A., III, 1959; Koons, D.L., 1956; Lorenzen, D.J., 1973; McMillen, H.O., 1947; Merryman, R.J., 1957; Neff, A.W., 1949; Nelson, P.D., 1952; Swett, E.R., Jr., 1959; Taylor, W.K., 1950
 vertebrate paleontology: Crum, E.R., 1917; Williams, M.E., 1972
 water resources: Hopp, G.A., 1915

Rooks County

geomorphology: Hoppie, J.R., 1980
 ground water: Martin, R.B., 1968
 igneous rocks: Harrower, K.L., 1976
 paleobotany: Thomasson, J.R., 1976
 paleoecology: Stewart, J.D., 1984
 petroleum: Harding, J.E., 1961
 sedimentary rocks: Dubins, I.M., 1947
 stratigraphy: McElroy, M.N., 1965; McKellar, T.R., 1962
 structural analysis: Eastty, F.D., Jr., 1959; Parkhurst, R.W., 1959
 vertebrate paleontology: Stewart, J.D., 1979

Rush County

geochemistry: Hart, Philip, 1977
 ground water: Avis, L.E., 1973; Martin, R.B., 1968
 igneous rocks: Harrower, K.L., 1976
 petroleum: Harding, J.E., 1961; Redman, K.G., 1947
 sedimentary rocks: Bieber, D.W., 1984; Stoneburner, R.K., 1982
 stratigraphy: Bergman, D.W., 1950; Irion, R.L., 1963; McElroy, M.N., 1965
 structural analysis: Hays, J.K., 1961; Korphage, M.L., 1973

Russell County

biostratigraphy: Manes, M.L., 1973
 clay mineralogy: Twell, C.F., 1964
 geomorphology: Cline, R.L., 1974
 ground water: Hansen, Terry J., 1977; Martin, R.B., 1968; Pollock, L.[M.], 1982; Runyon, H.E., 1936
 igneous rocks: Harrower, K.L., 1976
 invertebrate paleontology: Hattin, D.E., 1952
 paleobotany: Farley, M.B., 1982; Tetrick, M.J., 1979
 paleoecology: Archer, A.W., 1983; Hatfield, C.B., 1961; Siemers, C.T., 1971
 petroleum: Amstutz, P.T., Jr., 1943; Harding, J.E., 1961
 popular geology: Nickel, Gerhard, Jr., 1972
 sedimentary rocks: Al-arabi, N.A., 1971; Behairy, Abdel-Kader A., 1972; Dubins, I.M., 1947; Hopkins, R.T., 1977; Snyder, D.L., 1963
 soils: Kaufman, Abraham, 1950; Tye, R.V., 1946
 stratigraphy: Bergman, D.W., 1950; Cobban, W.A., 1949; Franks, P.C., 1967; Hostetler, J.M., 1967; Koester, E.A., 1929; McElroy, M.N., 1965; Stratton, J.L., 1942

Saline County

geomorphology: Cline, R.L., 1974; Hoppie, J.R., 1980
 hydrology: Dunlap, L.E., 1977
 petroleum: Talbot, W.C., 1954
 sedimentary structures: Mizula, J.W., 1960
 soils: Matthews, C.W., 1949
 stratigraphy: Franks, P.C., 1967; Taylor, M.H., [Jr.], 1947
 structural analysis: Pan, Chih-Wei, 1959; Thatcher, R.J., 1961

Scott County

ground water: Johnson, C.R., 1954; Yukler, M.A., 1976
 invertebrate paleontology: Thompson, T.L., 1962, 1965
 paleobotany: Segal, R.H., 1965
 petroleum: DeWoody, O.A., 1940
 sedimentary rocks: Abels, T.A., 1958
 soils: Cipra, J.E., 1970; Gwin, R.E., 1963
 stratigraphy: Miller, H.W., Jr., 1958
 well-logging: Canard, C.R., 1966

Sedgwick County

copper ores: Lambert, M.W., 1979
 engineering geology: Darrow, D.D., 1974
 geomorphology: Ham, W.E., 1939
 geophysical surveys: Noah, C.G., 1956
 ground water: Bagheri, Saeed, 1980
 hydrology: Alexander, J.P., 1978
 salt deposits: Tien, Pei-lin, 1965
 sedimentary rocks: Graff, H.J., 1970; Griffith, G.L., 1981
 stratigraphy: Brown, S.S.L., 1966; Courtier, W.H., 1934; McElroy, M.N., 1965; Swineford, Ada, 1954; Taylor, M.H., [Jr.], 1947; Winchell, R.L., 1957
 structural analysis: Butler, J.B., 1960; Dwivedi, R.L., 1983; Kelly, T.E., 1961; Lippert, R.H., 1964; Vickery, W.R., 1932; Wynn, L.L., 1959
 zinc ores: Seward, P.A., 1982

Seward County

paleoecology: Ho, Tong-Yun, 1964
 sedimentary rocks: Abels, T.A., 1958;
 Franz, R.H., 1984
 soils: Dixon, R.M., 1960
 stratigraphy: Gill, H.W., Jr., 1961; Malone,
 D.J., 1962; Renfroe, C.A., 1948;
 Severy, C.L., 1975; Worden, J.A., 1959
 structural analysis: Osborn, J.B., 1962

Shawnee County

areal geology: Beck, H.V., 1955; Davis,
 S.N., 1951; Hirsch, J.W., 1966; Lumb,
 W.E., 1933
 environmental geology: Gosch, J.W., 1970
 geomorphology: Baldwin, A.D., Jr., 1963;
 Elks, J.E., 1979; Hoover, W.F., 1932;
 Ratzlaff, J.R., 1970
 geophysical surveys: Wainwright, K.E.,
 1960
 ground water: Gilliland, W.J., 1973;
 Hodison, S.T., 1975
 igneous rocks: Adams, J.W., 1959
 invertebrate paleontology: Andersen, R.E.,
 1974; Brainard, R.H., 1978; Conkin,
 B.M., 1954; Grinnell, R.S., Jr., 1958;
 Purrington, Wealthy, 1948; Richards,
 H.G., 1955; Williams, C.C., 1941
 paleobotany: Schaeffer, K.M.M., 1960
 paleoecology: Griesemer, A.D., 1970; von
 Bitter, P.H., 1972
 sedimentary rocks: Bergstrom, R.E., 1953;
 Cubitt, J.M., 1975; McMillan, N.J.,
 1955; Perkins, H.C., 1952; Ronca, L.B.,
 1959; Ross, D.A., 1960; Svendsen,
 A.E., 1961; Wahrhaftig, Leon, 1952;
 Wainner, K.F., 1939
 soils: Campbell, J.B., Jr., 1976; Johnson,
 J.L., 1973; Travis, D.O., 1965, 1970
 stratigraphy: Bemasek, R.A., 1967;
 Cambridge, T.R., 1959; Fisher, W.L.,
 1980; Gilmore, John B., 1972; Girardot,
 S.L., 1962; Mendoza, H.A., 1959;
 Owen, D.E., 1959; SeEVERS, W.J., 1960;
 Seiler, C.D., 1951; Stephenson, L.G.,
 1958; Wood, R.L., 1959; Zandell, C.H.,
 1963
 vertebrate paleontology: Tway, L.E., 1977

Sheridan County

geomorphology: Hoppie, J.R., 1980
 paleobotany: Segal, R.H., 1965
 stratigraphy: Hockens, S.N., 1959;
 McMurray, K.S., 1962; Walton, R.G.,
 1960
 structural analysis: Mehl, R.L., 1959;
 Parkhurst, R.W., 1959; Rohrbough,
 C.A., 1956
 well-logging: Canard, C.R., 1966

Sherman County

ground water: McClain, T.J., 1970
 hydrology: Alexander, J.P., 1978
 paleoecology: Lammons, J.M., 1969
 petroleum: Putman, B.M., 1960
 sedimentary rocks: Abels, T.A., 1958
 stratigraphy: Hockens, S.N., 1959;
 McElroy, M.N., 1965; McMurray, K.S.,
 1962; Walton, R.G., 1960
 structural analysis: Mehl, R.L., 1959;
 Rohrbough, C.A., 1956
 vertebrate paleontology: Harrison, J.A.,
 1979

Smith County

geomorphology: Hoppie, J.R., 1980
 invertebrate paleontology: Hattin, D.E.,
 1952; Morrow, A.L., 1931
 paleobotany: Segal, R.H., 1965
 sedimentary rocks: Dubins, I.M., 1947
 sediments: Metz, H.L., 1954
 soils: Badgley, W.A., 1957
 stratigraphy: McKellar, T.R., 1962; Miller,
 H.W., Jr., 1958
 structural analysis: Ansari, N.W., 1965

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clay mineralogy: Twell, C.F., 1964
 environmental geology: Gosch, J.W.,
 1970; Knight, C.W., 1971
 ground water: Martin, R.B., 1968
 hydrology: Cobb, P.M., 1980
 petroleum: Prelat, A.E., 1974
 stratigraphy: Courtier, W.H., 1934;
 McElroy, M.N., 1965
 structural analysis: Dwivedi, R.L., 1983;
 Geil, D.D., 1957; Lippert, R.H., 1964;
 Williams, C.D., 1968

Stanton County

sedimentary rocks: Abdullah, T.Y., 1983;
 White, L.M., 1981
 soils: Cipra, J.E., 1970
 stratigraphy: Gill, H.W., Jr., 1961; Malone,
 D.J., 1962; McManus, D.A., 1959;
 Renfroe, C.A., 1948; Severy, C.L.,
 1975; Worden, J.A., 1959
 structural analysis: Osborn, J.B., 1962

Stevens County

invertebrate paleontology: Thompson,
 T.L., 1965
 sedimentary rocks: Abdullah, T.Y., 1983;
 Abels, T.A., 1958; Franz, R.H., 1984;
 White, L.M., 1981
 soils: Dixon, R.M., 1960
 stratigraphy: Gill, H.W., Jr., 1961; Malone,
 D.J., 1962; McManus, D.A., 1959;
 Renfroe, C.A., 1948; Severy, C.L.,
 1975; Taylor, G.L., 1931; Worden, J.A.,
 1959
 structural analysis: Osborn, J.B., 1962

Sumner County

areal geology: Millison, C.D., 1927
 copper ores: Lambert, M.W., 1979
 geomorphology: Ham, W.E., 1939
 invertebrate paleontology: Lalicker, C.G.,
 1932; Maxey, J.R., 1932
 petroleum: Calvin, D.G., 1963
 sedimentary rocks: Graff, H.J., 1970;
 White, Stanton, 1960
 stratigraphy: Brown, S.S.L., 1966;
 Courtier, W.H., 1934; McNeeley, J.B.,
 1973; Swineford, Ada, 1954; Trotter,
 S.F., 1981; Winchell, R.L., 1957
 structural analysis: Butler, J.B., 1960;
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 Soucek, C.H., 1959; Wynn, L.L., 1959

Thomas County

environmental geology: Gosch, J.W., 1970
 geomorphology: Hoppie, J.R., 1980
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 soils: Naddih, B.I., 1960
 stratigraphy: Hockens, S.N., 1959;
 McMurray, K.S., 1962; Walton, R.G.,
 1960
 structural analysis: Mehl, R.L., 1959;
 Rohrbough, C.A., 1956
 well-logging: Canard, C.R., 1966

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biostratigraphy: Kolb, K.K., 1975; Martin,
 L.G., 1984
 ground water: Runyon, H.E., 1936
 invertebrate paleontology: Deiss, A.P.,
 1978; Loetterle, G.J., 1937
 paleoecology: Archer, A.W., 1983; Frey,
 R.W., 1969; Stewart, J.D., 1984
 sedimentary rocks: Dubins, I.M., 1947;
 Stoneburner, R.K., 1982
 stratigraphy: Irion, R.L., 1963; King, N.R.,
 1972; McElroy, M.N., 1965; McKellar,
 T.R., 1962; Miller, H.W., Jr., 1958;
 Stratton, J.L., 1942
 structural analysis: Hays, J.K., 1961
 vertebrate paleontology: Wilson, R.L.,
 1968

Wabaunsee County

areal geology: Beck, H.V., 1955; Hirsch,
 J.W., 1966
 biostratigraphy: Wind, F.H., 1973
 clay mineralogy: Asmussen, L.E., 1958
 environmental geology: True, M.L.K.,
 1969
 geomorphology: Fish, M.C., 1953;
 Hoover, W.F., 1932; Ratzlaff, J.R.,
 1970
 geophysical surveys: Baysinger, B.L.,
 1963
 ground water: Gilliland, W.J., 1973;
 Smith, James T., 1959
 invertebrate paleontology: Cuffey, R.J.,
 1966; Davis, M.E., 1951; Ehret, A.L.,
 Jr., 1961; Fisher, W.L., 1971; Fry, H.C.,
 Jr., 1975; Garihan, A.B.L., 1973;
 Grinnell, R.S., Jr., 1958; Little, J.M.,
 1965; Matthews, J.L., 1959; Newton,
 G.B., 1970; Perlmutter, Barry, 1971;
 Schmidt, Winfried, 1974; Simonsen,
 A.H., 1977; Sloan, K.W., 1963; Squires,
 J.M., 1952
 paleobotany: Schaeffer, K.M.M., 1960;
 Warren, K.M., Jr., 1969
 paleoecology: Ho, Tong-Yun, 1964; Kues,
 B.S., 1975; Peterson, Robert M., 1978;
 Tarkington, D.K., 1977; Yarrow, G.R.,
 1974
 paleogeography: Wells, J.D., 1950
 petroleum: Jackson, William, 1979
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 1951; Laporte, L.F., 1960; Twiss, P.C.,
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 1962; Girardot, S.L., 1962; Harding,
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 1963; SeEVERS, W.J., 1960; Seiler, C.D.,
 1951; Snyder, B.L., 1968; Stephenson,
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 structural analysis: Eccles, K.R., 1980;
 Gasaway, M.A., III, 1959; Koons, D.L.,
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ground water: Yukler, M.A., 1976
 paleobotany: Segal, R.H., 1965

- paleoecology: Archer, A.W., 1983;
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clay mineralogy: Bryson, W.R., 1959;
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1970; Jacques, T.E., 1964; Jewett, J.M.,
1929; Squires, J.M., 1952
paleoecology: Brondos, M.D., 1983; Frost,
J.G., 1968; Senich, M.A., 1975; Wood,
R.H., II, 1977
petroleum: Benson, D.L., 1923; Calvin,
D.G., 1963; Schlinsog, D.G., 1982
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Dawson, W.C., 1984; Kidder, D.L.,
1982; Minor, J.A., 1969; Mitchell, J.C.,
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1980; Schroeder, R.J., 1967; Schutter,
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1958; Winchell, R.L., 1957
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1970; Thompson, T.L., 1965
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W.G., 1958; Eastwood, W.P., 1958;
Haggiagi, M.A., 1970; Monger, J.W.H.,
1961; Troell, A.R., Jr., 1965; Winchell,
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areal geology: Dufford, A.E., 1953
clay mineralogy: Watkins, K.N., 1957
diagenesis: Nollsch, D.A., 1983
engineering geology: Roth, J.C., 1980;
Stauffer, T.P., Sr., 1972; Walters, R.L.,
1984
geomorphology: Elks, J.E., 1979; Hoover,
W.F., 1932; Simms, J.J., 1975
invertebrate paleontology: Baesemann,
J.F., 1971; Cocke, J.M., 1970; Grinnell,
R.S., Jr., 1958; Jewett, J.M., 1929; Roy,
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1983; Wainner, K.F., 1939; Whitcomb,
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water resources: White, E.A., 1909

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structural analysis: Abemathy, G.E., 1925; McQuillan, M.W., 1968
see also Bevier coal bed, Burbank sand, Cabaniss group, Cattlemen sandstone, Croweburg coal bed, Croweburg cyclothem, Excello shale member, Fleming coal bed, Lagonda formation, "Lagonda interval," Mineral coal bed, Mulkycoal bed, Robinson Branch coal bed, Skinner sandstone, "Squirrel sandstone," Weir-Pittsburg coal bed
- Cabaniss group**
stratigraphy: Howe, W.B., 1954
see also Cabaniss Formation
- Calhoun Shale**
invertebrate paleontology: Andersen, R.E., 1974
stratigraphy: Cambridge, T.R., 1959; Lamoreaux, S.B., 1984
see also Topeka megacyclothem
- Caneyville limestone**
sedimentary rocks: Drake, L.Y., 1951; Wahrhaftig, Leon, 1952
- Canville Limestone Member**
paleoecology: Frost, J.G., 1968
sedimentary rocks: Railsback, L.B., 1983; Twiss, P.C., 1955
- Captain Creek Limestone Member**
clay mineralogy: Watkins, K.N., 1957
- invertebrate paleontology: Roy, M.B., 1966
paleoecology: Brondos, M.D., 1983
sedimentary rocks: Hopkins, R.T., 1977; Prochnow, Suzanne, 1982
stratigraphy: Eastwood, W.P., 1958
- Carlile Shale**
areal geology: Mack, L.E., 1959
biostratigraphy: Manes, M.L., 1973
ground water: Yukler, M.A., 1976
invertebrate paleontology: Crick, R.E., 1976; Griffith, J.H., 1947; Hattin, D.E., 1952; Morrow, A.L., 1931; Worstell, P.J., 1966
paleoecology: Archer, A.W., 1983; Stewart, J.D., 1984
stratigraphy: Cobban, W.A., 1949; Hostetler, J.M., 1967
- Cattlemen sandstone** *see also* Cabaniss Formation
- Cave Creek formation** *see also* Blaine Formation
- Cedar Bluff coal bed**
sedimentary rocks: Schutter, S.R., 1983
see also Galesburg Shale
- Cedar Hills Sandstone**
ground water: Pollock, L.[M.].J., 1982
sedimentation: Holdoway, K.A., 1976
stratigraphy: Campbell, C.L., 1963
- "Centerville Lagonda sandstone"**
sedimentary rocks: Reinholtz, P.N., 1982
- Chanute Shale**
invertebrate paleontology: Baesemann, J.F., 1971
sedimentary rocks: Mitchell, J.C., 1981
stratigraphy: Burchett, R.R., 1959; Haggiagi, M.A., 1970; Schulte, G.S., 1958
see also "Layton sandstone," Noxie sandstone member, Thayer coal bed
- Chase Group**
areal geology: Barrett, W.J., 1958; Beshears, G.T., 1958
biostratigraphy: Wind, F.H., 1973
clay mineralogy: Bryson, W.R., 1959
environmental geology: Hall, R.A., 1979
ground water: Bell, T.C., 1974
igneous rocks: Dyer, R.G., 1970
invertebrate paleontology: Clark, W.K., 1950; Davis, M.E., 1951; Lalicker, C.G., 1932; Maxey, J.R., 1932
sedimentary rocks: Cubitt, J.M., 1975; Johnson, W.B., 1949
stratigraphy: Buller, J.V., 1968; Carl, M.F., 1980; Dishman, B.D., 1969; Russell, J.L., 1967; Verville, G.J., 1951
see also Big Blue series, Five-finger carbonate
- Chattanooga Shale**
sedimentary rocks: Blythe, J.G., 1950
stratigraphy: Hilpman, P.L., 1969
structural analysis: Hylton, G.K., 1960
see also "Kinderhook shale," Misener sandstone member, Sylamore sandstone
- Checkerboard Limestone**
stratigraphy: Davis, J.R., 1939; Emery, P.A., 1962; Hatcher, D.A., 1961; Ravn, R.L., 1981
- Chelsea Sandstone Member**
paleobotany: Baxendale, R.W., 1977
sedimentary rocks: Van Dyke, R.J., 1976
- Cherokee Group**
clay mineralogy: Shannon, E.H.M., 1978; Tien, Pei-lin, 1973
engineering geology: Gadde, P.R., 1977
geophysical surveys: Vargas, J.F., 1984
ground water: Pollock, L.[M.].J., 1982
invertebrate paleontology: Orlansky, Ralph, 1951
paleobotany: Baxendale, R.W., 1977
petroleum: Gould, G.F., 1975
sedimentary rocks: Bieber, D.W., 1984; Hambleton, W.W., 1951; Hulse, W.J., 1978; Lardner, J.E., 1984; Marafa, H.Y., 1980; Reinholtz, P.N., 1982; Robinson, R.J., 1983; Stoneburner, R.K., 1982; Van Dyke, R.J., 1976; Woody, M.D., 1984; Worthington, R.E., 1982
sedimentary structures: Perkins, T.W., 1974
stratigraphy: Abemathy, G.E., 1936; Harris, J.W., 1984; Howe, W.B., 1954; Jungmann, W.L., 1964; Maderak, M.L., 1960; McMurray, K.S., 1962
structural analysis: McQuillan, M.W., 1968
see also Inola limestone member
- "Cherokee" sandstone**
geochemistry: Nicastro, L.J., 1983
- Cherokee Shale**
coal deposits: Abemathy, G.E., 1926
invertebrate paleontology: Laukel, Q.C., 1956
lead ores: Harbaugh, J.W., 1950; Netzeband, W.F., 1927
paleobotany: Morgan, J.L., 1955
petroleum: Benson, D.L., 1923
structural analysis: Abemathy, G.E., 1925
- Cherryvale Shale**
invertebrate paleontology: Baesemann, J.F., 1971; Cocke, J.M., 1970; Welch, R.G., 1964
sedimentary rocks: Kahle, C.F., 1962; Siebels, C.J., 1981
- Chesterian Series**
lead ores: Netzeband, W.F., 1927
stratigraphy: Gill, H.W., Jr., 1961; Severy, C.L., 1975
- Cheyenne Sandstone**
ground water: Crook, M.C., 1975
paleobotany: Ward, J.V., 1983
popular geology: Nickel, Gerhard, Jr., 1972
sedimentary rocks: Fisher, R.D., 1977
stratigraphy: Courtier, W.H., 1934
- Church Limestone Member**
sedimentary rocks: Pawel, D.T., 1975
stratigraphy: Mendoza, H.A., 1959
- Cimarronian series**
ground water: Runyon, H.E., 1936
- Cimarronian stage** *see also* Cimarron series
- Coal Creek Limestone Member**
sedimentary rocks: Bergstrom, R.E., 1953
- Codell Sandstone Member**
sedimentary rocks: Singh, Gambhir, 1965; Wallace, K.C., 1979
stratigraphy: McKellar, T.R., 1962
- Colorado Group**
invertebrate paleontology: Morrow, A.L., 1931
stratigraphy: Cobban, W.A., 1949; Morrow, A.L., 1941
see also Benton group

- Columbus coal bed**
coal deposits: Abernathy, G.E., 1926
see also Rowe coal bed, Krebs Formation
- Columbus sandstone**
structural analysis: Abernathy, G.E., 1925
- Comanche Group**
vertebrate paleontology: Harksen, J.C., 1963
- Corbin City Limestone Member**
sedimentary rocks: Stone, W.P., Jr., 1979
- Cottage Grove Sandstone Member**
petroleum: Calvin, D.G., 1963
stratigraphy: Haggiagi, M.A., 1970; Schulte, G.S., 1958
- Cotter Dolomite**
stratigraphy: Siler, J.C., 1958
- Cottonwood Limestone Member**
clay mineralogy: Dulekoz, Erhan, 1969; Stindl, Heribert, 1966
invertebrate paleontology: Matthews, J.L., 1959
sedimentary rocks: Laporte, L.F., 1960; Pecchioni, L.L., 1981; Wilbur, R.O., 1956
sedimentary structures: Walters, C.P., 1938
structural analysis: Bruton, R.L., 1958; Coombs, V.B., 1948; McMillen, H.O., 1947
- Council Grove Group**
areal geology: Beck, H.V., 1955
environmental geology: Hall, R.A., 1979; Smith, B.J. (Stout), 1976
geochemistry: Switek, John, 1977
geophysical surveys: Mathias, K.E., 1972
gypsum deposits: Fairchild, P.W., 1949
invertebrate paleontology: Clark, W.K., 1950; Davis, M.E., 1951; Edmiston, E.F., 1932; Ehret, A.L., Jr., 1961; Lalicker, C.G., 1932; Little, J.M., 1965; Maxey, J.R., 1932; Perlmutter, Barry, 1971
paleoecology: Peterson, Robert M., 1978
sedimentary rocks: Cubitt, J.M., 1975; Erlenwein, S.D., 1978; Huber, D.D., 1964; Johnson, W.B., 1949; Parish, K.L., 1952; Terwilliger-Robertson, S.J., 1983; White, L.M., 1981
stratigraphy: Avers, D.D., 1968; Buller, J.V., 1968; Dishman, B.D., 1969; Fudge, M.R., 1974; McCrone, A.W., 1960; Snyder, B.L., 1968; Verville, G.J., 1951
see also Big Blue series, Five-finger carbonate, Garrison formation
- Cowley Formation**
lead ores: Wallace, M.H., 1942
stratigraphy: Oliver, L.G., 1975
- Cresswell Limestone Member**
areal geology: Mendenhall, R.A., 1958
clay mineralogy: Bryson, W.R., 1959; Watkins, K.N., 1957
sedimentary rocks: Haury, C.E., 1984; Wilbur, R.O., 1956
- Critzer limestone member**
sedimentary rocks: Underwood, M.R., 1984
stratigraphy: Ravn, R.L., 1981
see also Hertha Limestone
- Crooked Creek Formation**
areal geology: Stevens, J.B., 1963
invertebrate paleontology: Gutentag, E.D., 1958; Miller, B.B., 1960, 1963
stratigraphy: Kovach, J.T., 1979
see also Borchers ash
- Crouse Limestone**
environmental geology: Hall, R.A., 1979
paleoecology: Yarrow, G.R., 1974
sedimentary rocks: Huber, D.D., 1964; Voran, R.L., 1977; Wilbur, R.O., 1956
stratigraphy: Bigelow, Nelson, Jr., 1954; Dishman, B.D., 1969
structural analysis: Lorenzen, D.J., 1973
- Crowe Limestone**
invertebrate paleontology: Ehret, A.L., Jr., 1961
- Croweburg coal bed**
coal deposits: Cobb, J.C., 1981
paleogeography: Wright, C.R., 1965
sedimentary rocks: McKinney, J.S., 1959
see also Cabaniss Formation
- Croweburg cyclothem**
paleogeography: Wright, C.R., 1965
see also Cabaniss Formation
- Curzon Member**
invertebrate paleontology: Grinnell, R.S., Jr., 1958
sedimentary rocks: Bergstrom, R.E., 1953; Ronca, L.B., 1959
- Custerian series**
stratigraphy: Swineford, Ada, 1954
- Dakota Formation**
areal geology: Mack, L.E., 1959
clay deposits: Belchic, George, 1915
geomorphology: Hoppie, J.R., 1980
ground water: Crook, M.C., 1975
hydrology: Dunlap, L.E., 1977
paleobotany: Farley, M.B., 1982
paleoecology: Siemers, C.T., 1971
sediments: Reimer, L.J., 1975
stratigraphy: Carl, M.F., 1980; Franks, P.C., 1967; Gould, C.N., 1901; Miesse, J.V., 1974
- Dakota Group**
ground water: Lippert, Verne, 1937
sedimentary rocks: Larsen, V.E., 1953
sedimentary structures: Mizula, J.W., 1960
stratigraphy: Courtier, W.H., 1934
vertebrate paleontology: Harksen, J.C., 1963
- Dakota Sandstone**
paleoecology: Archer, A.W., 1983
popular geology: Nickel, Gerhard, Jr., 1972
sedimentary rocks: Karl, H.A., 1971
see also Omadi sandstone
- David City Formation**
sediments: Conrad, O.G., 1963
- "Dawson" shale**
sedimentary rocks: Kidder, D.L., 1982
see also Marmaton Group
- Day Creek Dolomite**
environmental geology: Smith, B.J. (Stout), 1976
sedimentary rocks: Welsh, J.P., 1966
stratigraphy: Broin, T.L., 1957; Hollweg, W.A., 1964
- Deer Creek Limestone**
invertebrate paleontology: Conkin, B.M., 1954; Schroeder, R.J., 1961
limestone deposits: Rummels, R.T., 1951
paleoecology: Carlton, D.R., 1975; von Bitter, P.H., 1972
stratigraphy: Cambridge, T.R., 1959; Scafe, Don, 1963
see also Deer Creek megacyclothem
- Deer Creek megacyclothem**
paleogeography: Dickson, B.A., 1965
see also Deer Creek Limestone, Tecumseh Shale
- Dennis Limestone**
invertebrate paleontology: Baesemann, J.F., 1971; Cocke, J.M., 1970; Qandil, Yacoub, 1961
paleoecology: Frost, J.G., 1968
sedimentary rocks: Railsback, L.B., 1983; Schroeder, R.J., 1967
- Desmoinesian Series**
invertebrate paleontology: Alexander, R.D., 1953; Jeffords, R.M., 1941, 1946; Spencer, R.S., 1962
paleobotany: Morgan, J.L., 1955
paleogeography: Orlopp, D.E., 1964
stratigraphy: Maderak, M.L., 1960; Miller, W.F., 1955
well-logging: Canard, C.R., 1966
- Dodds Creek sandstone member**
stratigraphy: Stobbe, W.J., 1971
- Dog Creek Shale**
gypsum deposits: McGregor, D.J., 1948
stratigraphy: Fay, R.O., 1961
- Donegal limestone** *see also* Hollenberg limestone member
- Doniphan Shale Member**
invertebrate paleontology: Maerz, R.H., Jr., 1976
paleoecology: Rowell, B.F., 1972
- Douglas Group**
areal geology: Ball, M.M., 1957; Ball, S.M., 1958; Carlson, W.A., 1952; Laughlin, D.J., 1957; Reynolds, J.R., 1957; Wing, M.E., 1921
environmental geology: Elliott, R.G., 1973
hydrology: Yukler, M.A., 1974
invertebrate paleontology: Richards, H.G., 1955; Squires, J.M., 1952
sedimentary rocks: Cubitt, J.M., 1975
sedimentary structures: Bower, R.R., 1961
stratigraphy: Ball, S.M., 1964; Hockens, S.N., 1959; Miller, D.E., 1963; Newell, N.D., 1931; Patterson, Joseph M., 1933; Stephenson, L.G., 1958; Verville, G.J., 1951
structural analysis: Strong, R.M., 1960
vertebrate paleontology: Crum, E.R., 1917
see also Pedee group
- Dover Limestone Member**
paleoecology: Tasch, Paul, 1952
sedimentary rocks: Drake, L.Y., 1951; Twiss, P.C., 1955; Wahrhaftig, Leon, 1952
stratigraphy: Seevers, W.J., 1960
- Doyle Shale**
biostratigraphy: Wind, F.H., 1973
limestone deposits: Rummels, R.T., 1951
sedimentary structures: Hooker, R.A., 1956
stratigraphy: Carl, M.F., 1980; Dishman, B.D., 1969
- Drum Limestone**
invertebrate paleontology: Baesemann, J.F., 1971; Cocke, J.M., 1970; Welch, R.G., 1964
sedimentary rocks: Schroeder, R.J., 1967; Stone, W.P., Jr., 1979
stratigraphy: Culbertson, A.E., 1915

- Dry Branch Creek formation** *see also* Marmaton Group
- Dry Shale Member**
paleobotany: Schaeffer, K.M.M., 1960
paleoecology: Tasch, Paul, 1952
stratigraphy: Seevers, W.J., 1960
- Du Bois Limestone Member**
invertebrate paleontology: Brainard, R.H., 1978
sedimentary rocks: Bergstrom, R.E., 1953; Ronca, L.B., 1959
- early Chase megacyclothem**
stratigraphy: Dishman, B.D., 1969
- early Council Grove megacyclothem**
stratigraphy: Avers, D.D., 1968
- Easty Creek Shale**
clay mineralogy: McPherron, D.S., 1956
environmental geology: Hall, R.A., 1979; Smith, B.J. (Stout), 1976
gypsum deposits: Fairchild, P.W., 1949
sedimentary rocks: Huber, D.D., 1964
stratigraphy: Dishman, B.D., 1969
structural analysis: Lorenzen, D.J., 1973
- Eiss Limestone Member**
paleoecology: Dietsch, H.A., 1956
sedimentary rocks: Dowling, P.L., Jr., 1967; Wilbur, R.O., 1956
- Elgin Sandstone Member**
stratigraphy: Brown, S.S.L., 1966
- Elmdale shale**
sedimentary structures: Walters, C.P., 1938
see also Foraker Limestone, Johnson Shale, Red Eagle Limestone, Roca Shale
- Elmont Limestone Member**
sedimentary rocks: Wahrhaftig, Leon, 1952
stratigraphy: Gilmore, John B., 1972; Renfro, A.R., 1963; Underwood, J.O., 1964
- Emporia Limestone**
paleoecology: Pearce, R.W., 1973; Scott, D.R., 1973
stratigraphy: Gilmore, John B., 1972; Girardot, S.L., 1962; Underwood, J.O., 1964
- Englevalle Sandstone Member**
stratigraphy: Howard, L.W., 1959; Jewett, J.M., 1943
- "Equus beds"**
stratigraphy: Semken, H.A., Jr., 1965
see also McPherson Formation
- Ervine Creek Limestone Member**
paleoecology: Griesemer, A.D., 1970
sedimentary rocks: Bergstrom, R.E., 1953; Ronca, L.B., 1959; Svendsen, A.E., 1961
stratigraphy: Lamoreaux, S.B., 1984
- Eskridge Shale**
clay mineralogy: Asmussen, L.E., 1958; Dulekoz, Erhan, 1969; Hargadine, G.D., 1959
environmental geology: Hall, R.A., 1979
paleogeography: Wells, J.D., 1950
sedimentary rocks: Pecchioni, L.L., 1981; Russell, J.L., 1974; Waterman, W.D., 1951
stratigraphy: Snyder, B.L., 1968
- Eudora Shale Member**
paleoecology: Brondos, M.D., 1983
petroleum: Schlinsog, D.G., 1982
- phosphate deposits: Randle, R.F., 1949
sedimentary rocks: Kidder, D.L., 1982; Malinky, J.M., 1980; Moussavi-Harami, Reza, 1980; Schutter, S.R., 1983
- Excello shale**
petroleum: Schlinsog, D.G., 1982
- Excello shale member**
paleoecology: Gamble, J.C., 1967
see also Cabaniss Formation
- Fairport Chalk Member**
biostratigraphy: Manes, M.L., 1973
invertebrate paleontology: Hattin, D.E., 1952
paleoecology: Stewart, J.D., 1984
sedimentary rocks: Singh, Gambhir, 1965
- Falls City Limestone**
invertebrate paleontology: Spencer, R.S., 1968
paleobotany: Barker, G.W., 1983
sedimentary rocks: Drake, L.Y., 1951; Twiss, P.C., 1955
stratigraphy: Bemasek, R.A., 1967
- Farley Limestone Member**
invertebrate paleontology: Grinnell, R.S., Jr., 1958
sedimentary rocks: Crowley, D.J., 1966
stratigraphy: Wilson, J. A., 1959
- Five Point Limestone Member**
invertebrate paleontology: Mathews, J.L., 1959
sedimentary rocks: Drake, L.Y., 1951; Twiss, P.C., 1955
- Five-finger carbonate**
sedimentary rocks: White, L.M., 1981
see also Council Grove Group, Chase Group
- Fleming coal bed**
coal deposits: Cobb, J.C., 1981
paleobotany: Baxendale, R.W., 1977; Cridland, A.A., 1958; Felix, C.J., 1952; Hamms, V.L., 1959; Jones, K.D., 1968; Roth, Elmer A., 1954; Schabillion, J.T., 1967, 1969; Segal, R.H., 1966
sedimentary structures: Perkins, T.W., 1974
see also Cabaniss Formation
- Florena Shale Member**
biostratigraphy: Haworth, R.H., 1955
clay mineralogy: McPherron, D.S., 1956
invertebrate paleontology: Heaslip, W.G., 1955; Kornicker, L.S., 1954; Reider, E.R., 1952; Sawyer, J.F., 1954; Spencer, R.S., 1968; Truxell, R.E., 1951; Walker, B.H., 1951; Wells, Dana, 1929
- Florence Limestone Member**
sedimentary rocks: Hartig, R.L., 1954; Haury, C.E., 1984; Markley, L.C., 1953
stratigraphy: Carl, M.F., 1980
structural analysis: Kotoyantz, A.A., 1956
- Flower-pot Shale**
gypsum deposits: McGregor, D.J., 1948
sedimentation: Holdoway, K.A., 1976
stratigraphy: Campbell, C.L., 1963; Fay, R.O., 1961
- Foraker Limestone**
geochemistry: Switek, John, 1977
invertebrate paleontology: Ehret, A.L., Jr., 1961; Little, J.M., 1965; Schmidt, Winfried, 1974
paleoecology: Peterson, Robert M., 1978; Yarrow, G.R., 1974
- sedimentary rocks: Haury, C.E., 1984
stratigraphy: Avers, D.D., 1968; Bemasek, R.A., 1967; Garber, M.S., 1962
see also Elmdale shale
- Fort Hays Limestone Member**
biostratigraphy: Manes, M.L., 1973
ground water: Johnson, C.R., 1954
invertebrate paleontology: Deiss, A.P., 1978
paleoecology: Baldwin, E.A., 1976; Frey, R.W., 1969
sedimentary rocks: Dubins, I.M., 1947; Singh, Gambhir, 1965
sediments: Reimer, L.J., 1975
stratigraphy: Drees, R.H., 1974; King, N.R., 1972; Miller, H.W., Jr., 1958
- Fort Riley Limestone**
areal geology: Beshears, G.T., 1958
clay mineralogy: Bryson, W.R., 1959; Watkins, K.N., 1957
geomorphology: Baehr, W.M., 1954
invertebrate paleontology: Stude, J.R., 1961
paleobotany: Young, C.R., 1969
petroleum: Benson, D.L., 1923
sedimentary rocks: Grossnickle, W.E., 1961; Hinshaw, G.C., 1960
stratigraphy: Carl, M.F., 1980
structural analysis: Archer, R.D., 1951
- Fort Scott coal bed** *see also* Mulky coal bed
- Fort Scott Limestone**
geophysical surveys: Vargas, J.F., 1984
ground water: Pollock, L.[M.], 1982
sedimentary rocks: Schroeder, R.J., 1967; Stoneburner, R.K., 1982
stratigraphy: Jewett, J.M., 1943
structural analysis: McQuillan, M.W., 1968
see also Blackjack Creek limestone member, Higginsville limestone member, Little Osage shale member
- Frisbie Limestone Member**
sedimentary rocks: Crowley, D.J., 1966
stratigraphy: Wilson, J. A., 1959
- Funston cyclothem**
stratigraphy: Bigelow, Nelson, Jr., 1954
see also Funston Limestone, Speiser Shale
- Funston Limestone**
environmental geology: Hall, R.A., 1979
invertebrate paleontology: Ehret, A.L., Jr., 1961
sedimentary rocks: Abdullah, T.Y., 1983; Hartig, R.L., 1954; Wilbur, R.O., 1956
stratigraphy: Bigelow, Nelson, Jr., 1954; Dishman, B.D., 1969; Empie, J.S., 1961
see also Funston cyclothem
- Gage Shale Member**
clay mineralogy: Bryson, W.R., 1959
sedimentary rocks: Waterman, W.D., 1951
- Galesburg Shale**
sedimentary rocks: Schutter, S.R., 1983
stratigraphy: Stobbe, W.J., 1971
see also Cedar Bluff coal bed, Dodds Creek sandstone member
- Garrison formation**
invertebrate paleontology: Wells, Dana, 1929
see also Council Grove Group
- Gearyan Series**
invertebrate paleontology: Pattengill, M.G., 1964

- Gearyan stage** *see also* Gearyan Series
"GH bed"
mineral deposits: Schmidt, R.A., 1959
- Gilman Canyon Formation**
vertebrate paleontology: Stewart, J.D., 1979
- Gilman Canyon loess**
stratigraphy: Caspall, F.C., 1970
- Giltmore City Limestone**
stratigraphy: Hilpman, P.L., 1969
- Glenrock Limestone Member**
clay mineralogy: Asmussen, L.E., 1958
invertebrate paleontology: Matthews, J.L., 1959
stratigraphy: McCrone, A.W., 1960
- Gorham sand**
ground water: Runyon, H.E., 1936
- Grand Falls Formation**
mineral deposits: Hagni, R.D., 1962
- Grand Haven Member**
invertebrate paleontology: Matthews, J.L., 1959
sedimentary rocks: Drake, L.Y., 1951; Twiss, P.C., 1955
stratigraphy: Seevers, W.J., 1960
- Grandhaven Limestone Member**
paleoecology: Tasch, Paul, 1952
sedimentary rocks: Wahrhaftig, Leon, 1952
- Graneros Shale**
areal geology: Mack, L.E., 1959
geomorphology: Hoppie, J.R., 1980
ground water: Yukler, M.A., 1976
invertebrate paleontology: Morrow, A.L., 1931
paleobotany: Tetrick, M.J., 1979
paleoecology: Archer, A.W., 1983; Hatfield, C.B., 1961
sedimentary rocks: Al-arabi, N.A., 1971; Behairy, Abdel-Kader A., 1972; Larsen, V.E., 1953; Snyder, D.L., 1963
stratigraphy: Cobban, W.A., 1949; Courtier, W.H., 1934
- Grant Shale Member**
clay mineralogy: Bryson, W.R., 1959
invertebrate paleontology: Pattengill, M.G., 1964
- Grayhorse Limestone Member** *see also* Caneyville limestone
- Greenhorn Limestone**
areal geology: Mack, L.E., 1959
geomorphology: Hoppie, J.R., 1980
ground water: Yukler, M.A., 1976
invertebrate paleontology: Morrow, A.L., 1931; Worstell, P.J., 1966
paleoecology: Archer, A.W., 1983
stratigraphy: Bergman, D.W., 1950; Cobban, W.A., 1949; Courtier, W.H., 1934
structural analysis: Hays, J.K., 1961
vertebrate paleontology: Harksen, J.C., 1963
- Grenola Limestone**
clay mineralogy: Dulekoz, Erhan, 1969; Hargadine, G.D., 1959
environmental geology: Hall, R.A., 1979
invertebrate paleontology: Ehret, A.L., Jr., 1961
sedimentary rocks: Pecchioni, L.L., 1981
stratigraphy: Lane, N.G., 1954; Snyder, B.L., 1968
- Hamlin Shale Member**
paleobotany: Barker, G.W., 1983
paleoecology: Peterson, Robert M., 1978
stratigraphy: Fisher, W.L., 1980
- Happy Hollow Limestone Member**
sedimentary rocks: Wahrhaftig, Leon, 1952
- Harper Sandstone**
stratigraphy: Campbell, C.L., 1963
- Harper Siltstone**
sedimentation: Holdoway, K.A., 1976
- Hartford Limestone Member**
sedimentary rocks: Bergstrom, R.E., 1953; Ronca, L.B., 1959
stratigraphy: Lamoreaux, S.B., 1984
- Harveyville Shale Member**
stratigraphy: Gilmore, John B., 1972; Underwood, J.O., 1964
- Haskell Limestone Member**
clay mineralogy: Jamkhindikar, S.M., 1969
geochronology: Peam, W.C., 1959
sedimentary rocks: Rutan, Debra, 1980
stratigraphy: Ball, S.M., 1964
- Haskew gypsum member**
stratigraphy: Malone, D.J., 1962
see also Blaine Formation
- Havensville Shale Member**
clay mineralogy: Lee, Moon J., 1972; McPherron, D.S., 1956
invertebrate paleontology: Spencer, R.S., 1968
sedimentary rocks: Hartig, R.L., 1954
stratigraphy: Hattin, D.E., 1954
- Hawxby Shale Member**
paleobotany: Barker, G.W., 1983
- Heebner Shale Member**
petroleum: Kopper, R.W., 1982; Schlinsog, D.G., 1982
sedimentary rocks: Crouch, M.L., 1971; Evans, J.K., 1967; Lane, D.W., 1958
stratigraphy: Smith, C.C., 1938
structural analysis: Briggeman, H.W., 1959
vertebrate paleontology: Tway, L.E., 1982
- Hepler sandstone member**
sedimentary rocks: White, Stanton, 1960
stratigraphy: Hatcher, D.A., 1961
see also Pleasanton Group
- Herlington Limestone**
clay mineralogy: Bryson, W.R., 1959
sedimentary rocks: Wilbur, R.O., 1956
- Herlington Member**
clay mineralogy: Watkins, K.N., 1957
sedimentary rocks: Haury, C.E., 1984
- Hertha Limestone**
invertebrate paleontology: Baesemann, J.F., 1971; Cocke, J.M., 1970; Qandil, Yacoub, 1961
limestone deposits: Runnels, R.T., 1951
sedimentary rocks: Lawson, R.W., 1953; Schroeder, R.J., 1967
stratigraphy: Ravn, R.L., 1981
see also Critzer limestone member, Mound City shale member, Sniabar limestone member
- Heumader Shale Member**
sedimentary rocks: Lane, D.W., 1958; Noonan, J.M., 1971
- Hickory Creek Shale Member**
invertebrate paleontology: Jacques, T.E., 1964
- Higginsville limestone member**
invertebrate paleontology: Laukel, Q.C., 1956
stratigraphy: Jewett, J.M., 1943
see also Fort Scott Limestone
- High Plains aquifer** *see also* Ogallala Formation
- Holdenville Shale**
stratigraphy: Jewett, J.M., 1943
- Holdrege Formation**
see also "Equus beds"
- Hollenberg limestone member**
clay mineralogy: Bryson, W.R., 1959
sedimentary rocks: Wilbur, R.O., 1956
- Holmesville Shale Member**
clay mineralogy: Bryson, W.R., 1959
sedimentary rocks: Waterman, W.D., 1951
- Hooser Shale Member**
clay mineralogy: McPherron, D.S., 1956
- Howard Limestone**
sedimentary rocks: Fullerton, L.B., 1970; McMillan, N.J., 1955; Pawel, D.T., 1975; Wahrhaftig, Leon, 1952
stratigraphy: Mendoza, H.A., 1959
- Howe Limestone Member**
clay mineralogy: Asmussen, L.E., 1958
stratigraphy: McCrone, A.W., 1960
- Hughes Creek Shale Member**
invertebrate paleontology: Fisher, W.L., 1971; Little, J.M., 1965; Matthews, J.L., 1959; Schmidt, Winfried, 1974
paleoecology: Tarkington, D.K., 1977; Yarrow, G.R., 1974
stratigraphy: Garber, M.S., 1962
- Hunton Formation**
geophysical surveys: Baysinger, B.L., 1963
stratigraphy: Taylor, M.H., [Jr.], 1947
structural analysis: Ansari, N.W., 1965; Kotoyantz, A.A., 1956; Stermin, J.E., 1961; Tucker, N.A., 1956
see also Hunton group
- Hunton group**
sedimentary rocks: Miller, R.E., 1963
see also Hunton Formation
- Hushpuckney Shale Member**
petroleum: Kopper, R.W., 1982
sedimentary rocks: Kidder, D.L., 1982
- Hutchinson Salt Member**
engineering geology: Snyder, J.D., 1960
geomorphology: Stewart, G.F., 1973
ground water: Hansen, Terry J., 1977
hydrology: Dunlap, L.E., 1977
salt deposits: Holdoway, K.A., 1972; Horner, R.M., 1914; Lomenick, T.F., 1968; Tien, Pei-lin, 1965
sedimentary rocks: Berg, J.A., 1981; Green, L.K., 1963
stratigraphy: Vincent, D.A., 1965
structural analysis: Bonchonsky, A.P., 1957
- Idenbro limestone member**
invertebrate paleontology: Laukel, Q.C., 1956
see also Lenapah Limestone
- Illinoisan Stage**
paleoecology: Ho, Tong-Yun, 1964
- Indian Cave Sandstone Bed**
paleobotany: Barker, G.W., 1983
sedimentary rocks: Ossian, C.R., 1974; Voss, J.D., 1972
stratigraphy: Harding, K.S., 1951

- Inola limestone member**
sedimentary rocks: Robinson, R.J., 1983
stratigraphy: Mannhard, G.W., 1972
see also Cherokee Group
- Iola Limestone**
invertebrate paleontology: Baesemann, J.F., 1971; Cocke, J.M., 1970; Jewett, J.M., 1929; Welch, R.G., 1964
limestone deposits: Runnels, R.T., 1951
sedimentary rocks: Dawson, W.C., 1984; Mitchell, J.C., 1981; Schroeder, R.J., 1967
stratigraphy: Burchett, R.R., 1959
- Iowa Point Shale Member**
sedimentary rocks: Wainner, K.F., 1939
- Ireland Sandstone Member**
clay mineralogy: Jamkhindikar, S.M., 1969
ground water: Vis, B.J., 1981
sedimentary rocks: Rutan, Debra, 1980; Wainner, K.F., 1939
sedimentary structures: Bower, R.R., 1961
stratigraphy: Ball, S.M., 1964; Sanders, D.T., 1957; Stephenson, L.G., 1958
- Island Creek Shale Member**
sedimentary rocks: Crowley, D.J., 1966
stratigraphy: Wilson, J.A., 1959
- Jackson Park Shale**
geomorphology: Baldwin, A.D., Jr., 1963
paleoecology: Peterson, Robert M., 1978
stratigraphy: Bemasek, R.A., 1967
- Janssen Clay Member**
sedimentary rocks: Karl, H.A., 1971; Snyder, D.L., 1963
- Jefferson City Dolomite**
stratigraphy: Siler, J.C., 1958
- Jim Creek Limestone Member**
invertebrate paleontology: Matthews, J.L., 1959
sedimentary rocks: Drake, L.Y., 1951; Twiss, P.C., 1955; Wahrhaftig, Leon, 1952
- Johnson Shale**
clay mineralogy: Asmussen, L.E., 1958
stratigraphy: Avers, D.D., 1968; McCrone, A.W., 1960
see also Elmdale shale, Red Eagle cyclothem
- Kansan Stage**
paleoecology: Ho, Tong-Yun, 1964
- Kansas City Group**
areal geology: Ball, M.M., 1957; Ball, S.M., 1958
clay mineralogy: Twell, C.F., 1964
enhanced recovery: Hunt, J.A., 1981
geomorphology: Simms, J.J., 1975
ground water: Pollock, L.[M.], 1982
invertebrate paleontology: Baesemann, J.F., 1971; Squires, J.M., 1952
paleogeography: Home, J.C., 1965
petroleum: Benson, D.L., 1923; Calvin, D.G., 1963; Kopper, R.W., 1982; Putman, B.M., 1960
sedimentary rocks: Cubitt, J.M., 1975; Lawson, R.W., 1953; Verhulst, A.T., 1970
sedimentary structures: Hall, B.P., 1961
stratigraphy: Aufmuth, R.E., 1966;
- Burchett, R.R., 1959; Hockens, S.N., 1959; Jungmann, W.L., 1964; Lamerson, P.R., 1956; Machovec, M.A., 1963; Miller, D.E., 1963; Newell, N.D., 1931, 1933; Ravn, R.L., 1981
structural analysis: Booth, A.L., 1962; Gerhard, R.G., 1965; Herman, C.W., 1957; Parkhurst, R.W., 1959; Sandlin, G.S., 1957; Strong, R.M., 1960
see also Bronson group, Bronson subgroup
- Kanwaka Shale Member**
stratigraphy: Smith, C.C., 1938
- Kanwaka Shale**
invertebrate paleontology: Purrington, Wealthy, 1948
soils: Savage, M.E.A., 1961
stratigraphy: Braden, W.J., 1958; Brown, S.S.L., 1966; Schrott, R.O., 1966
see also Lecompton megacyclothem, Oread megacyclothem
- Kearny Formation**
sedimentary rocks: Abels, T.A., 1958; Franz, R.H., 1984
stratigraphy: McManus, D.A., 1959; McMurray, K.S., 1962
- Keokuk Limestone**
lead ores: Harbaugh, J.W., 1950; Wallace, M.H., 1942
limestone deposits: Runnels, R.T., 1951
mineral deposits: Hagni, R.D., 1962; Schmidt, R.A., 1959
sedimentary rocks: Saadallah, A.A., 1964
structural analysis: Desai, A.A., 1966
zinc ores: Wei, Chi-Sheng, 1975
- Kereford Limestone Member**
sedimentary rocks: Bergstrom, R.E., 1953; Ronca, L.B., 1959
stratigraphy: Monger, J.W.H., 1961; Smith, C.C., 1938
- "Keyes sand"**
sedimentary rocks: Abels, T.A., 1958
- Keyes sandstone**
structural analysis: Strunk, P.M., 1958
see also Morrowan Series
- "Kinderhook shale"**
structural analysis: Ehm, A.E., 1965; Kotoyantz, A.A., 1956
see also Chattanooga Shale
- Kingsdown Formation**
areal geology: Schultz, G.E., 1966
invertebrate paleontology: Devore, C.H., 1974; Gutentag, E.D., 1958; Miller, B.B., 1960, 1963
- Kingsdown Silt**
invertebrate paleontology: Franzen, D.S., 1946
- Kinney Limestone Member**
sedimentary rocks: Hartig, R.L., 1954
- Kiowa Formation**
geomorphology: Hoppie, J.R., 1980
ground water: Crook, M.C., 1975
hydrology: Dunlap, L.E., 1977
invertebrate paleontology: Scott, R.W., 1967
paleobotany: Ward, J.V., 1983
popular geology: Nickel, Gerhard, Jr., 1972
sedimentary rocks: Larsen, V.E., 1953
stratigraphy: Franks, P.C., 1967
- Kiowa Shale**
areal geology: Mack, L.E., 1959
biostratigraphy: Cooper, W.W., 1967
- sedimentary rocks: King, G.E., 1972
soils: Matthews, C.W., 1949
- "Knobtown sandstone"**
stratigraphy: Hatcher, D.A., 1961
see also Tackett Formation
- Krebs Formation**
clay mineralogy: Tien, Pei-lin, 1973
stratigraphy: Harris, J.W., 1984
structural analysis: McQuillan, M.W., 1968
see also Columbus coal bed, Riverton coal bed
- Krebs group**
stratigraphy: Howe, W.B., 1954
- Krider Limestone Member**
clay mineralogy: Bryson, W.R., 1959
- Laberdie limestone member**
invertebrate paleontology: Laukel, Q.C., 1956
paleoecology: Gamble, J.C., 1967
stratigraphy: Jewett, J.M., 1943; Price, R.C., 1981
see also Pawnee Limestone
- Labette Shale**
paleoecology: Gamble, J.C., 1967
stratigraphy: Jewett, J.M., 1943; Price, R.C., 1981
- Ladore Shale**
invertebrate paleontology: Baesemann, J.F., 1971; Qandil, Yacoub, 1961
- Lagonda formation**
paleogeography: Wright, C.R., 1965
see also Cabaniss Formation
- "Lagonda interval"**
sedimentary rocks: Aden, L.J., 1982; Lardner, J.E., 1984
see also Cabaniss Formation
- Lagonda Sandstone Member** *see also* "Bush City shoestring sandstone," "Centerville Lagonda sandstone"
- Lake Neosho Shale Member**
invertebrate paleontology: Johansson, M.V., 1960; Laukel, Q.C., 1956
paleoecology: Gamble, J.C., 1967
sedimentary rocks: Kidder, D.L., 1982; Schenk, P.E., 1963
stratigraphy: Jewett, J.M., 1943
- Lamotte Sandstone**
igneous rocks: Adams, J.W., 1959
- Lane Shale**
invertebrate paleontology: Welch, R.G., 1964
sedimentary rocks: Crowley, D.J., 1966; El-Zouki, A.Y., 1971; Mitchell, J.C., 1981
stratigraphy: Burchett, R.R., 1959
- Lansing Group**
areal geology: Ball, M.M., 1957; Ball, S.M., 1958; Laughlin, D.J., 1957; O'Connor, H.G., 1959; Reynolds, J.R., 1957
clay mineralogy: Twell, C.F., 1964
enhanced recovery: Hunt, J.A., 1981
geomorphology: Simms, J.J., 1975
ground water: Pollock, L.[M.], 1982
invertebrate paleontology: Baesemann, J.F., 1971; Squires, J.M., 1952; Zinser, R.W., 1950
petroleum: Kopper, R.W., 1982; Prelat, A.E., 1974; Putman, B.M., 1960
sedimentary rocks: Cubitt, J.M., 1975
stratigraphy: Aufmuth, R.E., 1966;

- Hockens, S.N., 1959; Miller, D.E., 1963; Newell, N.D., 1931, 1933; Winchell, R.L., 1957
- structural analysis: Ansari, N.W., 1965; Bonchonsky, A.P., 1957; Briggeman, H.W., 1959; Carr, D.D., 1958; Gerhard, R.G., 1965; Gould, J.G., 1952; Hays, J.K., 1961; Herman, C.W., 1957; Howard, J.R., 1958; Kotoyantz, A.A., 1956; Lippert, R.H., 1964; Mehl, R.L., 1959; Muehlhauser, H.C., 1958; Pan, Chih-Wei, 1959; Parkhurst, R.W., 1959; Rieb, S.L., 1954; Rohrbough, C.A., 1956; Sandlin, G.S., 1957; Shapley, R.A., 1956; Strong, R.M., 1960; Strunk, P.M., 1958; Tibbets, B.L., 1958
- Larsh Shale Member**
stratigraphy: Lamoreaux, S.B., 1984
- late Council Grove megacyclothem**
stratigraphy: Dishman, B.D., 1969
- Laverne Formation**
invertebrate paleontology: Gutentag, E.D., 1958
- Lawrence Shale**
clay mineralogy: Jamkhindikar, S.M., 1969
engineering geology: Lentell, T.L., 1977
geochronology: Peam, W.C., 1959
paleoecology: Hakes, W.G., 1972
sedimentary rocks: Joseph, K.T., 1972; Rutan, Debra, 1980; Toomey, D.F., 1964
sedimentary structures: Bower, R.R., 1961
stratigraphy: Ball, S.M., 1964; Patterson, Joseph M., 1933
see also Oread megacyclothem, Wathena shale member
- "Layton sandstone"**
stratigraphy: Schulte, G.S., 1958
see also Chanute Shale
- Leavenworth Limestone Member**
invertebrate paleontology: Brainard, R.H., 1978
paleobotany: Hutter, T.J., 1976
sedimentary rocks: Bergstrom, R.E., 1953; Lane, D.W., 1958; Ronca, L.B., 1959; Toomey, D.F., 1964
stratigraphy: Dixon, V.R., 1960; Smith, C.C., 1938
vertebrate paleontology: Tway, L.E., 1982
- Lecompton Limestone**
engineering geology: Lentell, T.L., 1977
invertebrate paleontology: Farmer, J.D., 1971; Maerz, R.H., Jr., 1976; Purring-ton, Wealthy, 1948; Schroeder, M.L., 1961
paleoecology: von Bitter, P.H., 1972
sedimentary rocks: Schroeder, R.J., 1967
stratigraphy: NewVille, H.L., 1958; Schrott, R.O., 1966
see also Lecompton megacyclothem
- Lecompton megacyclothem**
stratigraphy: NewVille, H.L., 1958; Schrott, R.O., 1966
see also Kanwaka Shale, Lecompton Limestone, Tecumseh Shale
- Legion Shale Member**
clay mineralogy: Hargadine, G.D., 1959
stratigraphy: Lane, N.G., 1954
- Lenapah Limestone**
sedimentary rocks: Schroeder, R.J., 1967; White, Stanton, 1960
stratigraphy: Jewett, J.M., 1943
see also Idenbro limestone member
- Lincoln Limestone Member**
sedimentary rocks: Snyder, D.L., 1963
- Little Cabin sandstone**
paleobotany: Morgan, J.L., 1955
- Little Osage shale member**
invertebrate paleontology: Laukel, Q.C., 1956
paleoecology: Gamble, J.C., 1967
petroleum: Schlinsog, D.G., 1982
stratigraphy: Jewett, J.M., 1943
see also Fort Scott Limestone
- Long Creek Limestone Member**
sedimentary rocks: Wilbur, R.O., 1956
stratigraphy: Garber, M.S., 1962
- Loup Fork beds**
stratigraphy: Bennett, D.K., 1984
see also Ogallala Formation
- Loveland Loess**
sediments: Metz, H.L., 1954
soils: Badgley, W.A., 1957; Hanna, R.M., 1954; Hawando, Tamiric, 1978
stratigraphy: Eshelman, R.E., 1974; Miesse, J.V., 1974
- "M bed"**
mineral deposits: Schmidt, R.A., 1959
sedimentary rocks: Saadallah, A.A., 1964
structural analysis: Desai, A.A., 1966; Toweh, S.H., 1978
- Maple Hill Limestone Member**
sedimentary rocks: Drake, L.Y., 1951; Twiss, P.C., 1955; Wahrhaftig, Leon, 1952
stratigraphy: Wood, R.L., 1959
- Marmaton Group**
invertebrate paleontology: Laukel, Q.C., 1956
petroleum: Redman, K.G., 1947
sedimentary rocks: Baab, Patricia, 1981
stratigraphy: Aufmuth, R.E., 1966; Baker, J.M., 1984; Jewett, J.M., 1943; Jungmann, W.L., 1964; Lemmons, J.E., 1946; Maderak, M.L., 1960; McMurray, K.S., 1962; Priest, Tim, 1982
structural analysis: McQuillan, M.W., 1968; Osborn, J.B., 1962
vertebrate paleontology: Crum, E.R., 1917
see also "Dawson" shale
- Matfield Shale**
biostratigraphy: Wind, F.H., 1973
environmental geology: Hall, R.A., 1979
stratigraphy: Dishman, B.D., 1969
- McPherson Formation**
stratigraphy: Semken, H.A., Jr., 1965
see also "Equus beds"
- Meade Formation**
ground water: Johnson, C.R., 1954
stratigraphy: Semken, H.A., Jr., 1965
see also Meade Group
- Meade Group**
invertebrate paleontology: Franzen, D.S., 1946; Gutentag, E.D., 1958
see also Meade formation
- medial Chase megacyclothem**
stratigraphy: Dishman, B.D., 1969
- Medicine Lodge Gypsum Member**
gypsum deposits: McGregor, D.J., 1948
stratigraphy: Malone, D.J., 1962
- Memorial shale** *see also* Holdenville Shale
- Meramecian Series** *see also* Meramecian stage, Spergen limestone
- Meramecian stage**
invertebrate paleontology: Thompson, T.L., 1962, 1965
stratigraphy: McNeeley, J.B., 1973
- Merriam Limestone Member**
invertebrate paleontology: Roy, M.B., 1966
stratigraphy: McManus, D.A., 1956
- Middle Creek limestone member**
diagenesis: Nollsch, D.A., 1983
sedimentary rocks: Lawson, R.W., 1953
- Mine Creek shale member**
paleoecology: Gamble, J.C., 1967
stratigraphy: Jewett, J.M., 1943; Price, R.C., 1981
see also Pawnee Limestone
- Mineral coal bed**
coal deposits: Cobb, J.C., 1981
paleobotany: Baxendale, R.W., 1977; Cridland, A.A., 1958; Jones, K.D., 1968; Otto, D.A., 1967; Roth, Elmer A., 1954; Schabillon, J.T., 1967, 1969; Segal, R.H., 1966; Urban, J.B., 1962
sedimentary rocks: Hambleton, W.W., 1951
sedimentary structures: Perkins, T.W., 1974
see also Cabaniss Formation
- Misener formation**
stratigraphy: Taylor, M.H., [Jr.], 1947
- Misener sandstone member**
structural analysis: Myers, R.E., 1959
see also Chattanooga Shale
- Mississippian "chat"**
sedimentary rocks: Markley, L.C., 1953
structural analysis: Hylton, G.K., 1960
- "Mississippian limestone"**
geophysical surveys: Baysinger, B.L., 1963
stratigraphy: Worden, J.A., 1959
structural analysis: Anderson, T.E., 1949; Ansari, N.W., 1965; Booth, A.L., 1962; Briggeman, H.W., 1959; Hays, J.K., 1961; Hylton, G.K., 1960; Kotoyantz, A.A., 1956; Muehlhauser, H.C., 1958; Myers, R.E., 1959; Nicholas, R.H., 1954; Olson, D.R., 1956; Pan, Chih-Wei, 1959; Ricci, A.T., 1955; Rieb, S.L., 1954; Rohrbough, C.A., 1956; Shapley, R.A., 1956; Soucek, C.H., 1959; Sternin, J.E., 1961; Strong, R.M., 1960; Tucker, N.A., 1956
- Missler Member**
stratigraphy: Spicer, S.R., 1975
- Missourian Series**
invertebrate paleontology: Jeffords, R.M., 1941, 1946; Spencer, R.S., 1962; West, R.R., 1962
stratigraphy: Miller, W.F., 1955; Walton, R.G., 1960
well-logging: Canard, C.R., 1966
- Missourian stage** *see also* Missourian Series
- Morgan School shale member** *see also* Little Osage shale member
- Morrill Limestone Member**
sedimentary rocks: Wilbur, R.O., 1956
- Morrowan Series**
petroleum: Putman, B.M., 1960
sedimentary rocks: Abels, T.A., 1958; Franz, R.H., 1984
stratigraphy: Gill, H.W., Jr., 1961; Mannhard, G.W., 1972; Miller, W.F., 1955; Worden, J.A., 1959
see also Keyes sandstone

- Morrowan stage**
see "Purdy sandstone"
 "second Morrow sandstone"
 Morrowan Series
- Mound City shale member**
 stratigraphy: Ravn, R.L., 1981
see also Hertha Limestone
- Mound Valley limestone** *see also* Bethany Falls Limestone Member
- Mulberry coal bed**
 coal deposits: Cobb, J.C., 1981
 paleoecology: Gamble, J.C., 1967
see also Bandera Shale
- Mulky coal bed**
 coal deposits: Cobb, J.C., 1981
 paleoecology: Gamble, J.C., 1967
see also Cabaniss Formation, Fort Scott coal bed
- Muncie Creek Shale Member**
 phosphate deposits: Randle, R.F., 1949
 sedimentary rocks: Dawson, W.C., 1984;
 Kidder, D.L., 1982; Mitchell, J.C., 1981
- Myrick Station limestone member**
 paleoecology: Gamble, J.C., 1967
 stratigraphy: Jewett, J.M., 1943; Price, R.C., 1981
see also Pawnee Limestone
- Nebraska City Limestone Member** *see also* Caneyville limestone
- Nemaha subgroup**
 areal geology: Beck, H.V., 1955
see also Wabaunsee Group
- Neosho member**
 invertebrate paleontology: Wells, Dana, 1929
- Nescatunga gypsum member**
 stratigraphy: Malone, D.J., 1962
see also Blaine Formation
- Neva Limestone Member**
 clay mineralogy: Dulekoz, Erhan, 1969;
 Hargadine, G.D., 1959; Watkins, K.N., 1957
 geomorphology: Baldwin, A.D., Jr., 1963
 invertebrate paleontology: Bender, M.J., 1951; Mathews, J.L., 1959
 sedimentary rocks: Pecchioni, L.L., 1981;
 Wilbur, R.O., 1956
 stratigraphy: Lane, N.G., 1954
 structural analysis: McMillen, H.O., 1947
- Neva Limestone**
 clay mineralogy: Asmussen, L.E., 1958
 stratigraphy: Thompson, J.C., 1912
- Ninnescah Shale**
 environmental geology: Smith, B.J. (Stout), 1976
 sedimentary rocks: Graff, H.J., 1970
 soils: Matthews, C.W., 1949
 stratigraphy: Vincent, D.A., 1965
- Niobrara Chalk**
 ground water: Johnson, M.S., 1978;
 Yukler, M.A., 1976
 invertebrate paleontology: Logan, W.N., 1898; McClung, C.E., 1898; Morrow, A.L., 1931
 paleoecology: Archer, A.W., 1983; Frey, R.W., 1969
 sediments: Reimer, L.J., 1975
- Niobrara Formation**
 biostratigraphy: Manes, M.L., 1973
 ground water: Johnson, C.R., 1954;
 Johnson, M.S., 1978
 invertebrate paleontology: Deiss, A.P., 1978; Dring, N.B., 1977; Loetterle, G.J., 1937
 paleoecology: Baldwin, E.A., 1976;
 Stewart, J.D., 1984
 sedimentary rocks: Yamamoto, S., 1977
 stratigraphy: Cobban, W.A., 1949; Miller, H.W., Jr., 1958
 vertebrate paleontology: Harksen, J.C., 1963
see also Niobrara shale
- Niobrara shale** *see also* Niobrara Formation
- Nippewalla group**
 sedimentation: Holdoway, K.A., 1976
 stratigraphy: Campbell, C.L., 1963;
 Hollweg, W.A., 1964; Schumaker, R.D., 1966; Swineford, Ada, 1954
- Nodaway underclay**
 sedimentary rocks: McMillan, N.J., 1955
see also Aarde Shale Member
- Nolans Limestone**
 biostratigraphy: Wind, F.H., 1973
 ground water: Bell, T.C., 1974
 sedimentary rocks: Glossa, J.M., 1982
 stratigraphy: Carl, M.F., 1980; Russell, J.L., 1967
- Nowata Shale**
 sedimentary rocks: White, Stanton, 1960
 stratigraphy: Jewett, J.M., 1943
see also Walter Johnson sandstone member, "Wayside sand"
- Noxle sandstone member**
 stratigraphy: Haggiagi, M.A., 1970;
 Schulte, G.S., 1958
see also Chanute Shale
- Odee formation**
 areal geology: Stevens, J.B., 1963
 invertebrate paleontology: Gutentag, E.D., 1958
- Odell Shale**
 biostratigraphy: Wind, F.H., 1973
 clay mineralogy: Bryson, W.R., 1959
 ground water: Bell, T.C., 1974
 invertebrate paleontology: Pattengill, M.G., 1964
 stratigraphy: Carl, M.F., 1980; Russell, J.L., 1967
- Ogallala Formation**
 areal geology: Stevens, J.B., 1963
 geomorphology: Hoppie, J.R., 1980
 ground water: Johnson, C.R., 1954;
 Johnson, M.S., 1978; McClain, T.J., 1970; Oliver, Joseph W., 1981; Yukler, M.A., 1976
 invertebrate paleontology: Gutentag, E.D., 1958
 paleobotany: Segal, R.H., 1965; Thomasson, J.R., 1976
 sediments: Reimer, L.J., 1975
 stratigraphy: Bennett, D.K., 1984;
 Courtier, W.H., 1934; Kovach, J.T., 1979; Spicer, S.R., 1975
 vertebrate paleontology: Bennett, D.K., 1977; Harrison, J.A., 1979; Tallan, M.E., 1978; Wilson, R.L., 1968
 water resources: Collins, D.R., 1980
see also Ash Hollow member, High Plains aquifer, Loup Fork beds
- Oketo Shale Member**
 invertebrate paleontology: Pattengill, M.G., 1964
 paleoecology: Griffin, J.R., Jr., 1974;
 Kues, B.S., 1975
 stratigraphy: Carl, M.F., 1980
- Omadi sandstone**
 sedimentary structures: Mizula, J.W., 1960
see also Dakota Sandstone
- Onaga Shale**
 paleobotany: Barker, G.W., 1983
 stratigraphy: Bernasek, R.A., 1967;
 Girardot, S.L., 1962
- Onion Creek sandstone member**
 sedimentary rocks: Moussavi-Harami, Reza, 1980
see also Rock Lake Shale Member
- Oread Limestone**
 clay mineralogy: Jamkhindikar, S.M., 1969; Watkins, K.N., 1957
 engineering geology: Lentell, T.L., 1977
 invertebrate paleontology: Delo, D.M., 1928; Purrington, Wealthy, 1948;
 Schroeder, M.L., 1961
 paleoecology: von Bitter, P.H., 1972
 sedimentary rocks: Hill, W.E., Jr., 1964;
 Schroeder, R.J., 1967; Toomey, D.F., 1964
 soils: Savage, M.E.A., 1961
 stratigraphy: Ball, S.M., 1964; Braden, W.J., 1958; Cooley, D.R., 1952; Smith, C.C., 1938; Wolf, G.V., 1984
see also Oread megacyclothem
- Oread megacyclothem**
 sedimentary rocks: Lane, D.W., 1958;
 Toomey, D.F., 1964
 stratigraphy: Braden, W.J., 1958; Troell, A.R., Jr., 1965
see also Kanwaka Shale, Lawrence Shale, Oread Limestone
- Osagean Series**
 sedimentary rocks: Thomas, M.A., 1982
see also Osagian stage
- Osagian Stage**
 stratigraphy: McNecley, J.B., 1973
see also Osagean Series
- Oswald lime**
 ground water: Lippert, Verne, 1937;
 Runyon, H.E., 1936
- Ozawkie Limestone Member**
 sedimentary rocks: Bergstrom, R.E., 1953;
 Ronca, L.B., 1959
 stratigraphy: Newville, H.L., 1958
- Paddock Shale Member**
 clay mineralogy: Bryson, W.R., 1959
 invertebrate paleontology: Pattengill, M.G., 1964
- Paola Limestone Member**
 sedimentary rocks: Dawson, W.C., 1984;
 Lawson, R.W., 1953; Mitchell, J.C., 1981
- Pawnee Limestone**
 sedimentary rocks: Baab, Patricia, 1981;
 Schroeder, R.J., 1967; Stoneburner, R.K., 1982
 stratigraphy: Jewett, J.M., 1943; Price, R.C., 1981
- Pawnee Limestone** *see also* Laberdie limestone member, Mine Creek shale member, Myrick Station limestone member
- Pearl member**
 clay mineralogy: Bryson, W.R., 1959
see also Wellington Formation
- Pearlette Ash Member**
 geochronology: Boellstorff, J.D., 1973
 geomorphology: Cline, R.L., 1974
 vertebrate paleontology: Paulson, G.R., 1960

- Pedee group**
areal geology: Laughlin, D.J., 1957;
O'Connor, H.G., 1959; Reynolds, J.R.,
1957
stratigraphy: Hockens, S.N., 1959;
Stephenson, L.G., 1958; Verville, G.J.,
1951
see also Douglas Group
- Peoria formation**
stratigraphy: Eshelman, R.E., 1974
- Peoria loess**
sediments: Metz, H.L., 1954
soils: Badgley, W.A., 1957; Hawando,
Tamiré, 1978; Schaetzl, R.J., 1983
stratigraphy: Caspall, F.C., 1970
vertebrate paleontology: Stewart, J.D.,
1979
- Perry Farm Shale Member**
invertebrate paleontology: Laukel, Q.C.,
1956; Spencer, R.S., 1968
- Pierre Shale**
ground water: McClain, T.J., 1970;
Yukler, M.A., 1976
invertebrate paleontology: Logan, W.N.,
1898
paleoecology: Archer, A.W., 1983;
Lammons, J.M., 1969
sediments: Reimer, L.J., 1975
stratigraphy: Bergstresser, T.J., 1981;
Cobban, W.A., 1949; Miller, H.W., Jr.,
1958
vertebrate paleontology: Harksen, J.C.,
1963
- Pillsbury Shale**
paleobotany: Schaeffer, K.M.M., 1960
stratigraphy: Girardot, S.L., 1962; Seevers,
W.J., 1960
- Pittsburg-Midway coal bed**
structural analysis: Abernathy, G.E., 1925
- Plattsburg Limestone**
invertebrate paleontology: Cocke, J.M.,
1970
limestone deposits: Runnels, R.T., 1951
sedimentary rocks: Nelson, D.L., 1978;
Schroeder, R.J., 1967
- Plattsmouth Limestone Member**
invertebrate paleontology: Grinnell, R.S.,
Jr., 1958
sedimentary rocks: Bergstrom, R.E., 1953;
Hill, W.E., Jr., 1964; Lane, D.W., 1958;
Mathews, W.L., 1978; Ronca, L.B.,
1959
stratigraphy: Smith, C.C., 1938
vertebrate paleontology: Tway, L.E., 1982
- Pleasanton Formation**
phosphate deposits: Randle, R.F., 1949
- Pleasanton Group**
geomorphology: Simms, J.J., 1975
stratigraphy: Emery, P.A., 1962; Hatcher,
D.A., 1961; Jungmann, W.L., 1964;
Miller, D.E., 1963; Ravn, R.L., 1981;
Singer, C.R., 1965
see also Hepler sandstone member,
Seminole formation, Tackett formation
- Plumb Shale Member *see also* Caneyville
limestone**
- Pony Creek Shale Member**
paleobotany: Schaeffer, K.M.M., 1960
- Pottawatomie stage**
vertebrate paleontology: Crum, E.R., 1917
- "Purdy sandstone"**
sedimentary rocks: Abels, T.A., 1958
see also Morrowan Series
- Queen Hill Shale Member**
invertebrate paleontology: Maerz, R.H.,
Jr., 1976
- Quindaro Shale Member**
sedimentary rocks: Crowley, D.J., 1966
stratigraphy: Wilson, J.A., 1959
- Quivira Member**
phosphate deposits: Randle, R.F., 1949
- Raytown Limestone Member**
sedimentary rocks: Dawson, W.C., 1984;
Mitchell, J.C., 1981
- Reading Limestone Member**
paleoecology: Pearce, R.W., 1973; Scott,
D.R., 1973
sedimentary rocks: Wahrhaftig, Leon,
1952
stratigraphy: Gilmore, John B., 1972;
Underwood, J.O., 1964
- Reagan Sandstone**
stratigraphy: McElroy, M.N., 1965; Siler,
J.C., 1958
structural analysis: Mehl, R.L., 1959
- Red Eagle cyclothem**
stratigraphy: McCrone, A.W., 1960
see also Johnson Shale, Red Eagle
Limestone, Roca Shale
- Red Eagle Limestone**
invertebrate paleontology: Ehret, A.L., Jr.,
1961; Little, J.M., 1965
limestone deposits: Runnels, R.T., 1951
sedimentary rocks: Al-Khersan, H.F., 1969
stratigraphy: Avers, D.D., 1968; McCrone,
A.W., 1960
see also Elmdale shale, Red Eagle
cyclothem
- Red Fork sand *see also* Burbank sand**
- Reeds Spring formation**
mineral deposits: Hagni, R.D., 1962
- Reeds Spring Limestone Member**
lead ores: Harbaugh, J.W., 1950; Wallace,
M.H., 1942
zinc ores: Wei, Chi-Sheng, 1975
- Reeds Spring limestone *see also* Reeds
Spring Limestone Member**
- Rexroad Formation**
areal geology: Stevens, J.B., 1963;
Woodburne, M.O., 1960
invertebrate paleontology: Franzen, D.S.,
1946; Gutentag, E.D., 1958; Miller,
B.B., 1963
stratigraphy: Kovach, J.T., 1979
vertebrate paleontology: Hibbard, C.W.,
1941
- Richardson subgroup**
areal geology: Beck, H.V., 1955
see also Wabaunsee Group
- Riverton coal bed**
paleobotany: Morgan, J.L., 1955
paleoecology: Rosowitz, D.W., 1982
see also Krebs Formation
- Riverton formation**
geomorphology: Saueracker, P.R., 1966
- Robbins Shale Member**
clay mineralogy: Jamkhindikar, S.M.,
1969
sedimentary rocks: Rutan, Debra, 1980
stratigraphy: Ball, S.M., 1964
- Robinson Branch coal bed**
paleobotany: Otto, D.A., 1967
see also Cabaniss Formation
- Roca Shale**
clay mineralogy: Asmussen, L.E., 1958;
- Hargadine, G.D., 1959
paleobotany: Warren, K.M., Jr., 1969
sedimentary rocks: Waterman, W.D., 1951
stratigraphy: Avers, D.D., 1968; McCrone,
A.W., 1960; Snyder, B.L., 1968
see also Elmdale shale, Red Eagle
cyclothem
- Rock Bluff Limestone Member**
invertebrate paleontology: Brainard, R.H.,
1978
sedimentary rocks: Bergstrom, R.E., 1953;
Ronca, L.B., 1959
stratigraphy: Lamoreaux, S.B., 1984;
Zandell, C.H., 1963
- Rock Lake Shale Member**
paleoecology: Brondos, M.D., 1983;
Hakes, W.G., 1976
sedimentary rocks: Moussavi-Harami,
Reza, 1980; Russell, J.L., 1974
see also Onion Creek sandstone member,
Timber Hill siltstone bed, Victory
Junction sandstone
- Root Shale**
stratigraphy: Girardot, S.L., 1962
- Roubidoux Dolomite**
stratigraphy: Siler, J.C., 1958
- Roubidoux Formation**
lead ores: Netzeband, W.F., 1927
- Roubidoux sandstone *see also* Roubidoux
Formation**
- Rowe coal bed *see also* Columbus coal bed**
- Rulo Limestone Member**
sedimentary rocks: Wahrhaftig, Leon,
1952
- Sacfox subgroup**
areal geology: Beck, H.V., 1955
see also Wabaunsee Group
- Salem Limestone**
invertebrate paleontology: Thompson,
T.L., 1965
structural analysis: Funk, T.J., 1982
- Salem Point Shale Member**
clay mineralogy: Asmussen, L.E., 1958;
Hargadine, G.D., 1959
stratigraphy: Lane, N.G., 1954
- Sallyards Limestone Member**
clay mineralogy: Hargadine, G.D., 1959
stratigraphy: Lane, N.G., 1954
- Salt Plains Formation**
stratigraphy: Campbell, C.L., 1963
see also Salt Plains siltstone
- Salt Plains siltstone**
sedimentation: Holdoway, K.A., 1976
see also Salt Plains Formation
- Sanborn formation**
ground water: Johnson, C.R., 1954
stratigraphy: Semken, H.A., Jr., 1965
vertebrate paleontology: Harrison, J.A.,
1979
see also Sanborn Group
- Sanborn Group**
areal geology: Schultz, G.E., 1966
invertebrate paleontology: Franzen, D.S.,
1946; Gutentag, E.D., 1958
soils: Badgley, W.A., 1957
stratigraphy: Kovach, J.T., 1979; Spicer,
S.R., 1975
see also Sanborn formation
- Sangamon soil**
geomorphology: Cline, R.L., 1974
soils: Badgley, W.A., 1957
stratigraphy: Eshelman, R.E., 1974;
Miesse, J.V., 1974

- Sappa Formation**
stratigraphy: Einsohn, S.D., 1971; Eshelman, R.E., 1974
- Schroyer Limestone Member**
sedimentary rocks: Hartig, R.L., 1954; Markley, L.C., 1953; Stewart, J.W., 1963
stratigraphy: Hattin, D.E., 1954
- Scranton Shale**
stratigraphy: Girardot, S.L., 1962; Trotter, S.F., 1981
- "second Morrow sandstone"**
stratigraphy: Mannhard, G.W., 1972
see also Morrowan Series
- Sedalia Dolomite**
stratigraphy: Hilpman, P.L., 1969
- Seminole formation**
stratigraphy: Emery, P.A., 1962
see also Pleasanton Group
- Severy Shale**
sedimentary rocks: McMillan, N.J., 1955
- Shawnee Group**
areal geology: Carlson, W.A., 1952; Laughlin, D.J., 1957; Lumb, W.E., 1933; O'Connor, H.G., 1959; Reynolds, J.R., 1957; Wing, M.E., 1921
environmental geology: Elliott, R.G., 1973
ground water: Gogel, A.J., 1969; Stone, W.A., 1965
hydrology: Yukler, M.A., 1974
invertebrate paleontology: Brainard, R.H., 1978; Purrington, Wealthy, 1948; Richards, H.G., 1955; Schroeder, M.L., 1961; Squires, J.M., 1952; Williams, C.C., 1941
paleoecology: von Bitter, P.H., 1972
sedimentary rocks: Cubitt, J.M., 1975; Perkins, H.C., 1952
soils: Savage, M.E.A., 1961
stratigraphy: Ball, S.M., 1964; Cambridge, T.R., 1959; Hockens, S.N., 1959; Verville, G.J., 1951
structural analysis: Welch, V.J., 1951
vertebrate paleontology: Crum, E.R., 1917; Daly, Eleanor, 1981; Tway, L.E., 1977
- Sheldon Limestone Member**
sedimentary rocks: Ronca, L.B., 1959
- Shiner Gypsum Member**
stratigraphy: Malone, D.J., 1962
- "siliceous lime"**
ground water: Lippert, Verne, 1937
- Simpson Group**
petroleum: Redman, K.G., 1947
stratigraphy: Bradley, W.C., 1961; Kistler, J.O., 1952; Worden, J.A., 1959
structural analysis: Anderson, T.E., 1949; Briggeman, H.W., 1959; Soucek, C.H., 1959; Strong, R.M., 1960; Wynn, L.L., 1959
- Sioux quartzite**
soils: Mason, R.M., 1971
- Skinner sandstone**
sedimentary rocks: Hulse, W.J., 1978; Van Dyke, R.J., 1976
see also Cabaniss Formation
- Smoky Hill Chalk Member**
biostratigraphy: Martin, L.G., 1984
ground water: Johnson, C.R., 1954
invertebrate paleontology: Dring, N.B., 1977
paleoecology: Stewart, J.D., 1984
sedimentary rocks: Singh, Gambhir, 1965
- sediments: Reimer, L.J., 1975
stratigraphy: Miller, H.W., Jr., 1958
- Sniabar limestone member**
stratigraphy: Ravn, R.L., 1981
see also Hertha Limestone
- Snyderville Shale Member**
stratigraphy: Smith, C.C., 1938
- Soldier Creek Shale Member**
paleoecology: Sawin, R.S., 1977
sedimentary rocks: Ross, D.A., 1960
vertebrate paleontology: Chom, J.D., 1984
see also Gorham sand, Mississippian "chat"
- South Bend Limestone Member**
invertebrate paleontology: Roy, M.B., 1966
paleoecology: Brondos, M.D., 1983; Hakes, W.G., 1976
sedimentary rocks: Kahle, C.F., 1962
- Speiser Shale**
clay mineralogy: McPherron, D.S., 1956
environmental geology: Hall, R.A., 1979
invertebrate paleontology: Garihan, A.B.L., 1973; Newton, G.B., 1970; Pattengill, M.G., 1964; Simonsen, A.H., 1977
paleobotany: Schaeffer, K.M.M., 1960
sedimentary rocks: Hartig, R.L., 1954; Waterman, W.D., 1951
stratigraphy: Bigelow, Nelson, Jr., 1954; Dishman, B.D., 1969; Empie, J.S., 1961; Hattin, D.E., 1954
see also Funston cyclothem
- Spergen limestone**
stratigraphy: Irion, R.L., 1963
- Spring Branch Limestone Member**
sedimentary rocks: Bergstrom, R.E., 1953; Ronca, L.B., 1959
- Spring Hill Limestone Member**
invertebrate paleontology: Grinnell, R.S., Jr., 1958; Roy, M.B., 1966
sedimentary rocks: Nelson, D.L., 1978
- "Squirrel sandstone"**
sedimentary rocks: Lardner, J.E., 1984
see also Cabaniss Formation
- St. Joe Limestone Member**
lead ores: Harbaugh, J.W., 1950; Wallace, M.H., 1942
- St. Louis Limestone**
geochemistry: Nicastro, L.J., 1983
invertebrate paleontology: Thompson, T.L., 1965
sedimentary rocks: Robinson, R.J., 1983
stratigraphy: Severy, C.L., 1975
structural analysis: Funk, T.J., 1982
- St. Peter Sandstone**
stratigraphy: Kistler, J.O., 1952
- "Stalnakker sandstone"**
stratigraphy: Winchell, R.L., 1957
structural analysis: Soucek, C.H., 1959
see also Tonganoxie Sandstone Member
- Stanton Limestone**
invertebrate paleontology: Cocke, J.M., 1970
limestone deposits: Runnels, R.T., 1951
paleoecology: Brondos, M.D., 1983; Senich, M.A., 1975, 1978; Wood, R.H., II, 1977
sedimentary rocks: Kahle, C.F., 1962; Malinky, J.M., 1980; Moussavi-Harami, Reza, 1980; Schroeder, R.J., 1967; Wilson, F.W., 1957
- Stark Shale Member**
paleoecology: Frost, J.G., 1968
sedimentary rocks: Kidder, D.L., 1982; Schutter, S.R., 1983
- Ste. Genevieve Limestone**
geochemistry: Nicastro, L.J., 1983
invertebrate paleontology: Thompson, T.L., 1965
stratigraphy: Severy, C.L., 1975
structural analysis: Funk, T.J., 1982
- Stearns Shale**
clay mineralogy: McPherron, D.S., 1956
environmental geology: Hall, R.A., 1979
stratigraphy: Dishman, B.D., 1969; Snyder, B.L., 1968
- Stone Corral dolomite**
petroleum: Putman, B.M., 1960
- Stone Corral Formation**
environmental geology: Smith, B.J. (Stout), 1976
petroleum: Prelat, A.E., 1974
stratigraphy: Broin, T.L., 1957; Campbell, C.L., 1963; Vincent, D.A., 1965
structural analysis: Bonchonsky, A.P., 1957; Hays, J.K., 1961; Lippert, R.H., 1964; Mehl, R.L., 1959
- Stoner Limestone Member**
clay mineralogy: Watkins, K.N., 1957
invertebrate paleontology: Roy, M.B., 1966
paleoecology: Brondos, M.D., 1983
sedimentary rocks: Kahle, C.F., 1962; Moussavi-Harami, Reza, 1980
- Stormont limestone bed**
stratigraphy: Wood, R.L., 1959
see also Warnego Shale Member
- Stotler Limestone**
stratigraphy: Girardot, S.L., 1962; SeEVERS, W.J., 1960
- Stovall Limestone Member**
clay mineralogy: Bryson, W.R., 1959
sedimentary rocks: Wilbur, R.O., 1956
- Stranger Formation**
geochronology: Peam, W.C., 1959
sedimentary rocks: Schroeder, R.J., 1967
stratigraphy: Ball, S.M., 1964; Patterson, Joseph M., 1933
- Stull Shale Member**
paleoecology: Hakes, W.G., 1976
sedimentary rocks: Wainner, K.F., 1939
stratigraphy: Newville, H.L., 1958
- Sumner Group**
clay mineralogy: Bryson, W.R., 1959
environmental geology: Smith, B.J. (Stout), 1976
ground water: Bell, T.C., 1974; Hansen, Terry J., 1977
hydrology: Dunlap, L.E., 1977
stratigraphy: Carl, M.F., 1980; Fudge, M.R., 1974; Russell, J.L., 1967; Schumaker, R.D., 1966; Swineford, Ada, 1954; Vincent, D.A., 1965
see also Big Blue series
- Swope Limestone**
diagenesis: Nollsch, D.A., 1983
invertebrate paleontology: Baesemann, J.F., 1971; Cocke, J.M., 1970; Qandil, Yacoub, 1961
sedimentary rocks: Schroeder, R.J., 1967
stratigraphy: Mossler, J.H., 1970
see also Middle Creek limestone member

- Sylamore sandstone**
sedimentary rocks: Pittenger, H.A., 1981
see also Chattanooga Shale
- Tackett formation**
petroleum: Schlinsog, D.G., 1982
sedimentary rocks: Kidder, D.L., 1982; Underwood, M.R., 1984
stratigraphy: Emery, P.A., 1962; Ravn, R.L., 1981
see also "Bourbon flags," Pleasanton Group, "Knobtown sandstone"
- "Taloga" formation**
stratigraphy: Kovach, J.T., 1979
see also Big Basin Formation
- Tarkio Limestone Member**
geomorphology: Baldwin, A.D., Jr., 1963
ground water: Pollock, L.[M.].J., 1982
sedimentary rocks: Drake, L.Y., 1951; Wahrhaftig, Leon, 1952
stratigraphy: Wood, R.L., 1959
structural analysis: Swett, E.R., Jr., 1959
- Tecumseh Shale**
engineering geology: Lentell, T.L., 1977
invertebrate paleontology: Purrington, Wealthy, 1948
paleoecology: Hakes, W.G., 1976
sedimentary rocks: Wainner, K.F., 1939
stratigraphy: Newville, H.L., 1958; Schrott, R.O., 1966
see also Deer Creek megacyclothem, Lecompton megacyclothem
- Terra Cotta Clay Member**
sedimentary rocks: Karl, H.A., 1971; Snyder, D.L., 1963
- Thayer coal bed**
stratigraphy: Haggiagi, M.A., 1970
see also Chanute Shale
- "Thirteen Finger lime"**
sedimentary rocks: Robinson, R.J., 1983
see also Atoka Formation
- Threemile Limestone Member**
invertebrate paleontology: Fry, H.C., Jr., 1975
sedimentary rocks: Hartig, R.L., 1954; Markley, L.C., 1953; Wiman, W.D., 1966
stratigraphy: Hattin, D.E., 1954
- Timber Hill siltstone bed** *see also* Rock Lake Shale Member
- Timber Hill siltstone member**
sedimentary rocks: Moussavi-Harami, Reza, 1980
- Tonganoxle Sandstone Member**
ground water: Brothers, R.C., 1976; Vis, B.J., 1981
sedimentary rocks: Griffith, G.L., 1981; Lins, T.W., 1950; Minor, J.A., 1969; Wainner, K.F., 1939
sedimentary structures: Bower, R.R., 1961
stratigraphy: Ball, S.M., 1964; Sanders, D.T., 1957; Stephenson, L.G., 1958; Winchell, R.L., 1957
see also "Stalnakker sandstone"
- Topeka Limestone**
clay mineralogy: Watkins, K.N., 1957
ground water: Runyon, H.E., 1936
invertebrate paleontology: Hanson, Johna, 1973; Schroeder, M.L., 1961
limestone deposits: Runnels, R.T., 1951
paleoecology: von Bitter, P.H., 1972
stratigraphy: Cambridge, T.R., 1959; Dorsey, M.T., 1978
structural analysis: Bonchonsky, A.P., 1957; Hays, J.K., 1961; Strunk, P.M., 1958
vertebrate paleontology: Daly, Eleanor, 1981
see also Topeka megacyclothem
- Topeka megacyclothem**
paleogeography: Dickson, B.A., 1965
see also Calhoun Shale, Topeka Limestone
- Toronto Limestone Member**
clay mineralogy: Jamkhindikar, S.M., 1969
paleobotany: Carter, J.F., 1960
sedimentary rocks: Lane, D.W., 1958; Ronca, L.B., 1959
stratigraphy: Ball, S.M., 1964; Smith, C.C., 1938; Troell, A.R., Jr., 1965
- Towanda Limestone Member**
clay mineralogy: Bryson, W.R., 1959; Watkins, K.N., 1957
- Towle Shale Member**
paleobotany: Barker, G.W., 1983
- "upper Bluejacket" sandstone**
sedimentary rocks: Worthington, R.E., 1982
see also Bluejacket Sandstone Member
- Utopia Limestone Member**
sedimentary rocks: Fullerton, L.B., 1970
stratigraphy: Mendoza, H.A., 1959; Trotter, S.F., 1981
- "V" shale**
petroleum: Schlinsog, D.G., 1982
- Vanhem Formation**
invertebrate paleontology: Gutentag, E.D., 1958
stratigraphy: Spicer, S.R., 1975
- Verdigris Limestone Member**
paleogeography: Wright, C.R., 1965
see also Ardmore limestone
- Victory Junction sandstone member**
sedimentary rocks: Wainner, K.F., 1939
see also Rock Lake Shale Member
- Vilas Shale**
clay mineralogy: Kinell, C.B., III, 1964
sedimentary rocks: Schutter, S.R., 1983
- Vinland Shale Member**
sedimentary rocks: Wainner, K.F., 1939
sedimentary structures: Bower, R.R., 1961
stratigraphy: Ball, S.M., 1964
- Viola Limestone**
ground water: Pollock, L.[M.].J., 1982
sedimentary rocks: St. Clair, P.N., 1982
stratigraphy: Worden, J.A., 1959
structural analysis: Anderson, T.E., 1949; Briggeman, H.W., 1959; Gerhard, R.G., 1965; Hays, J.K., 1961; Kotoyantz, A.A., 1956; Lippert, R.H., 1964; Myers, R.E., 1959; Olson, D.R., 1956; Pan, Chih-Wei, 1959; Strong, R.M., 1960
well-logging: Bornemann, Erhard, 1979
zinc ores: Seward, P.A., 1982
- Virgilian Series**
invertebrate paleontology: Jeffords, R.M., 1946; Spencer, R.S., 1962
stratigraphy: Miller, W.F., 1955; Myers, D.E., 1968
well-logging: Canard, C.R., 1966
- Wabaunsee Group**
areal geology: Beck, H.V., 1955; Lumb, W.E., 1933
ground water: Gogel, A.J., 1969; Runyon, H.E., 1936; Stone, W.A., 1965
invertebrate paleontology: Perlmutter, Barry, 1971; Richards, H.G., 1955; Squires, J.M., 1952; Williams, C.C., 1941
paleoecology: Sawin, R.S., 1977
sedimentary rocks: Cubitt, J.M., 1975; Erlenwein, S.D., 1978; McMillan, N.J., 1955; Voss, J.D., 1972
stratigraphy: Fudge, M.R., 1974; Girardot, S.L., 1962; Hockens, S.N., 1959; Verville, G.J., 1951
vertebrate paleontology: Crum, E.R., 1917
see also Nemaha subgroup, Richardson subgroup, Sacfox subgroup
- Wakarusa Limestone Member**
paleoecology: Sawin, R.S., 1977
sedimentary rocks: Wahrhaftig, Leon, 1952
- Walter Johnson sandstone member**
sedimentary rocks: White, Stanton, 1960
see also Nowata Shale, "Wayside sand"
- Wamego Shale Member**
stratigraphy: Wood, R.L., 1959
see also Stormont limestone bed
- Warner Sandstone Member** *see also* Little Cabin sandstone
- Warsaw Limestone**
geochemistry: Broedel, V.J., 1984; Nicastro, L.J., 1983
invertebrate paleontology: Thompson, T.L., 1965
lead ores: Harbaugh, J.W., 1950; Wallace, M.H., 1942
mineral deposits: Hagni, R.D., 1962; Schmidt, R.A., 1959
sedimentary rocks: Saadallah, A.A., 1964
stratigraphy: Irion, R.L., 1963
structural analysis: Funk, T.J., 1982
- Wathena shale member**
clay mineralogy: Jamkhindikar, S.M., 1969
stratigraphy: Ball, S.M., 1964
see also Lawrence Shale
- Wauneta limestone bed**
stratigraphy: Mendoza, H.A., 1959
see also Aarde Shale Member
- "Wayside sand"**
sedimentary rocks: White, Stanton, 1960
see also Nowata Shale, Walter Johnson sandstone member
- Weir-Pittsburg coal bed**
coal deposits: Abernathy, G.E., 1926
geochemistry: Kopsick, D.A., 1980
paleobotany: Bond, T.A., 1963
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