Subsurface Geophysical Cross Section of Pennsylvanian-Aged Strata (Upper Cherokee Through Middle Shawnee Groups) in Eastern Kansas Extending from Southeastern Greenwood County, Kansas, to Central Wyandotte County, Kansas

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Datum = top of Hushpuckney Shale Member

Note: See text for further discussion of group boundaries.

Southwest **G**

Northeast **G′**

Cross Section E-E′ Intersect
15-073-23359
(All wells drilled to Kansas City Group)

15-073-20828
(no scale on log)

15-073-22096
(no scale on log)

Greenwood County

15-073-22946

15-073-19036
(no scale on log)

Woodson County

15-207-28389
(no scale on log)

15-207-27134
(no scale on log)

Woodson County

15-207-70855
(no scale on log)

15-207-27517

Coffey County

15-031-20485

15-031-23878

Cross Section D-D′ Intersect
15-031-21729
(no scale on log)

15-031-20212
(no scale on log)

Coffey County

Cross Section C-C′ Intersect
15-031-20304
(no scale on log)

Anderson County

15-003-21650

Franklin County

Cross Section B-B′ Intersect
15-059-22495

15-059-24675

15-059-22548

15-059-22768

15-059-24069

Cross Section A-A′ Intersect
15-059-24269

Franklin County

15-059-19215

Miami County

15-121-26912

Johnson County

15-091-23354

15-091-21988

15-091-24109

15-091-20522

15-091-20936
(no scale on log)

15-091-19073

Johnson County

15-091-23004

Wyandotte County

15-209-20045
(no scale on log)

Nomenclature
(ranked hierarchy)

Bronson Subgroup

Zarah Subgroup

Lane Sgp.

Hushpuckney Shale

Muncie Ck. Shale

Galesburg Shale

Stark Shale

Block Shale

Excello Shale

Vilas Shale

Quindaro Shale

Chanute Shale

upper Nellie Bly Formation

lower Nellie Bly Formation

Bonner Springs Shale

Middle Tiffany Shale

Island Creek Shale

Liberty Memorial Shale

Raytown Shale

Lenapah Limestone

Nowata Shale

Oswego Limestone

Labette Shale

Cherokee Group

Marmaton Group

Pleasanton Group

Kansas City Group

Lansing Group

Douglas Group

Shawnee Group

Lenah Bermuda

Queen Hill

This is likely Lawrence but is questionable due to deformation

unconformity

unconformity

Heebner

Oread

Plattsburg

Vilas

Quindaro

Bonner Springs

Lenapah

Nowata

Labette

Excello

Stark

Hushpuckney

Muncie Creek

Galesburg

Ardmore Limestone

Checkerboard Limestone

Pawnee Limestone

Fort Scott Limestone

Verdigris Limestone

Cabaniss Group

Krebs Group

Marmaton Group

Pleasanton Group

Kansas City Group

Lansing Group

Douglas Group

Shawnee Group

Modified for publication, Petrophysical cross section originally released in non-peer reviewed open-file report:
Oborny, S. C., and Hasiuk, F., 2022, Lithostratigraphic correlations of the upper Desmoinesian and Missourian stages (Pennsylvanian) in eastern Kansas: Kansas Geological Survey, Open-File Report 2022-2, 9 p., 10 plates.

CROSS SECTION LEGEND

- Predominantly carbonate interval. Some intervals may include black fissile shales (i.e., highstand shale).
- Intervals in which accommodation is predominantly filled by argillaceous and/or arenaceous shale lithologies. These intervals may include carbonate lenses (e.g., Chanute and Chanute Shale formations).
- Coal
- Indicates an intersect with another cross section.
- Group and/or subgroup boundary
- Postulated transform faults (e.g., Fall River Tectonic Zone)

Argillaceous Shale · Arenaceous Shale · Sandstone
Black Fissile Shale · Carbonate

Abbreviations

Fm.	Formation
Mbr.	Member
L.S. Sp.	Limestone Sp.
Ref. Bed	Reference Bed
Sh. Sp.	Shale Sp.
Coal	Coal
Ch. Chanute	Chanute Formation
Ch.	Chanute Shale
Ck.	Creek Limestone
Ex.	Excello Shale
Hush.	Hushpuckney Shale
Ls.	Lenapah Limestone
Lib.	Liberty Memorial Shale Member
Mem.	Member
Mu.	Muncie Creek Shale Member
N. B.	Nellie Bly Formation
Nowata	Nowata Shale Member
Rayt.	Raytown Limestone