Subsurface Geophysical Cross Section of Pennsylvanian-Aged Strata (Upper Cherokee Through Shawnee Groups) in Eastern Kansas Extending from North-Central Geary County, Kansas, to Central Crawford County, Kansas

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Datum = top of Hushpuckney Shale Member

Northwest
D
Southeast
D′
Geary County
Wabaunsee County
Morris County
Wabaunsee County
Lyon County
Lyon County
Coffey County
Cross Section F-F′ Intersect
Cross Section G-G′ Intersect
15-061-20022
15-061-20044
15-197-20267
15-127-20455
15-197-20269
15-111-20375
15-111-20438
15-111-20046
15-111-20257
15-111-20177
15-031-20592
15-031-20255
15-031-20552
15-031-21729
(no scale on GR or Neutron log)
Coffey County
Anderson County
Allen County
Cross Section H-H′ Intersect
15-031-23620
15-031-23435
15-003-23641
15-001-22025
15-001-29087
Driller's Log Notes in Red
Allen County
Cross Section I-I′ Intersect
15-001-28466
15-001-29596
15-001-25016
15-001-27549
Drillers Log
Hale R.V. #81
T.26R.21E.
sec. 27
SE NW NW
"Hepler Sand"
Bourbon County
15-011-70789
Bourbon County
Crawford County
15-011-23143
15-037-21606
15-037-21722
Missouri
Kansas
Oklahoma
Nomenclature
(revised herein)
Shawnee Group
Douglas Group
Lansing Group
Kansas City Group
Zarah Sgp.
Linn Sgp.
Bronson Sgp.
Pl. Grp.
Marmaton Group
lower Penn.
Mississippian
Devonian
Chattanooga Shale (Devonian-Mississippian)
Ordovician
Pennsylvanian
U
D
Heebner
Queen Hill
Eudora Shale
Vilas Shale
undifferentiated Lane Shale
Chanute Shale
Nellie Bly Formation
Stark Shale
Galesburg Shale
Hushpuckney Shale
Mound City Shale
Labette Shale
Fort Scott Limestone
unnamed ls.
CHEROKEE GROUP
Excello
GAMMA RAY
NEUTRON

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., Cherryvale and Chanute Shale formations).

⬛ Coal

🟨 Hepler Sandstone

★ Indicates an intersect with another cross section.

— Group and/or subgroup boundary

▤ Argillaceous Shale

▨ Arenaceous Shale

░ Sandstone

▩ Black Fissile Shale

▦ Carbonate

Note: See text for further discussion of the group boundaries.

Abbreviations:

Fm.	Formation
Grp.	Group
L.	Lower
Ls.	Limestone
Mbr.	Member
Sh./sh.	Shale
Sgp.	Subgroup
Alt.	Altamont Limestone
Crk.	Creek
Cr.	Critzer Limestone Member
Crk.	Creek
D.	Dewey Limestone
Ex.	Exline Limestone Member
Guth. Mnt.	Guthrie Mountain Shale Member
Hickory	Hickory Creek Shale Member
Isl.	Island Creek Shale Member
K.C. Grp.	Kansas City Group
Lans. Grp.	Lansing Group
Lib.	Liberty Memorial Shale
Ma.	Mantey Shale Member
Marm.	Marmaton Group
Merriam	Merriam Limestone Member
Muncie	Muncie Creek Shale Member
Penn.	Pennsylvanian
Pleas./Pl.	Pleasanton
Platts.	Plattsburg Limestone
S. H.	Shale Hill
Wy.	Wyandotte Limestone

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.