

R. A. Carmody

May, 1942

Adair and Morton, No. 1 Thompson
NW NE NW 16-22S-20W

Elevation 2199 feet

Rotary

Pennsylvanian

Shawnee group 3390-3810 feet

Douglas group 3810-3845 feet

Lansing-Kansas City--Bronson groups 3845-4220 feet.

Top Lansing subsea -1646 feet

Marmaton-Cherokee groups 4220-4425 feet

Pennsylvanian basal conglomerate 4410-4425 feet

4410-4425 feet Purple, yellow, gray, and various-colored
sandy clay.

Mississippian top 4425 feet

Subsea -2226 feet

Burlington-Keokuk Residuum ?

4425-4490 feet Chert, white, cream, and pale yellow,
smooth, flinty to rough, pitted, opaque.
Part asphaltic.

Fern Glen ?

4490-4510 feet Limestone, creamy white, with disseminated
large oolites. Some chert, as above--cave?

4510-4525 feet Oolitic limestone, as above, with dissem-
inated sand grains and clusters of sand
grains. (Fine to medium angular and
rounded sand grains.)

Kinderhook ?

4525-4550 feet Sandstone, white, fine, angular, with few
disseminated medium rounded grains. Part
with siliceous, calcareous, or dolomitic
cement. (Some oolitic limestone, as
above--probably cave)

4550-4585 feet Chert, yellow, orange, pink, white, and
various-colored, highly cloudy translucent
to opaque, part with imbedded sand grains.
Some vitreous quartzose chert, yellow and
white. Some sandstone, as above, and some
green, yellow, gray, and various-colored
sandy clay. (Some oolitic limestone, as
above--probably cave)

The above interval of conglomeratic material is very unusual for pre-Pennsylvanian sediments, and offers a variety of interpretations as to its origin and age. Until more information and control are available for this formation, I have tentatively assigned it to basal Mississippian (Kinderhook ?).

Ordovician top 4585 feet	(Probably several feet higher considering lag)	
		Subsea -2386 feet
Viola top 4585 feet		Subsea -2386 feet
4585-4630 feet	Limestone, white, crystalline, and some milky white, flinty chert.	
4630-4765 feet	Limestone, white and rare pink, crystalline, to dense, and dolomite, white and pink, granular to finely crystalline. Some chert, as above.	
4765-4795 feet	Dolomite, white, medium crystalline, porous.	
4795-4910 feet	Limestone, white and rare pink, crystalline. Some dolomite, white to pink and various-colored, fine to medium crystalline, and some chert, as above.	
4910-4917 feet	Limestone, as above, part with imbedded sand grains. Some chert, as above.	
4917-4940 feet	Limestone, pink and white, cryptocrystalline. Some chert, as above.	
4940-4945 feet	Limestone, as above, part with imbedded sand grains.	
Simpson top 4945 feet	(Probably several feet higher considering lag)	Subsea -2746 feet
4945-4965 feet	Shale, dark green, laminated, part with imbedded sand grains and some dolomitic and phosphatic sandstone.	
Arbuckle top 4960 feet	(Corrected 5 feet for lag)	
		Subsea -2761 feet
4960-5012 feet	TD. Dolomite, white to pink and various-colored, fine to medium and coarsely crystalline, part with interstitial tripoli.	

Note:

The 360 feet of Viola logged in this test is the greatest thickness of that formation encountered so far in any part of Kansas. It is nearly double the thickness found in producing areas such as the Zenith Field.