

Post Miss Penn Cavern

Pt

April, 1938.

Deep Rock #24 Baumer,
NE SW NE, 27-11S-17W,
Elevation 2002'
Rotary samples.

Pennsylvanian conglomerate 3468-3490'
3468-3470 Sand included in base of limestone.
3470-3470 Chert and clay shales. Chert of Viola types.

Post-Mississippian Pre-Pennsylvanian cavern filling 3490-3726'
3490-3575 White chert, wholly or in part tripolitic; also white siliceous clay and pyritic greenish white clay. The few cherts which are recognizable are Viola in type.
3575-3609 Similar to above. Also green shale with included phosphate; silicified bryozoa; and some sand aggregates. This material is Decorah in type and while it does not amount to more than one or two per cent of the footage, it is fairly well concentrated in this zone.
3609-3679 Chert, white, tripolitic; with siliceous clays and greenish white clays. The recognizable cherts are mainly Mississippian in type although there is some Viola material.
3679-3720 White siliceous and pyritic clays with considerable tripolitic chert. Some of the recognizable fragments are Mississippian and some are Viola. There is considerable caving and recirculated material and the exact makeup of the beds is not certain. Seemingly this zone has more clay and tripoli and less chunky chert.
3720-3726 Cotter chert. This material does not show until the sample 3726-31' but the lag on the dolomite top, at 3726' is 7' in the samples. It is notable that this is the first recognizable Arbuckle material.

Arbuckle	Top 3726'	Penetration 266'	Sub-sea, minus 1724'
3726-3992	Pre-Cotter dolomite.	Divisions as follows:	
<u>3726</u>	Post-Boyce	3726-3800	
<u>266</u>	Boyce	3800-3840	
	Pre-Boyce, Weigel		
	and pre-Weigel	3840-3935	
	Everleigh and		
	Reagan sandy dol.	3935-3992	

Pre-Cambrian Top 3992' Sub-sea, minus 1990'
3992-4001 Weathered biotite granite. All of the biotite has altered to chlorite.

See Weekly Letter #15, 1938, for discussion.