November, 1935.

Phillips #1 Houseman,
Sec. 30-22S-22W,
Elevation 2330'
2329 DF
Pre-Pennsylvanian

Mississippian	Top 4590'		Sub-sea, minus 2260'
Unit 3	4590-4695'	Thickness	105'
Unit 4	4695-4730	"	35
Kinderhook	4730-4785	"	55
			195'

Unit 4 of the Miss. is highly sandy. The Kinderhook is a slighly sandy dolomite.

Ordovician	Top 4785'		Sub-sea, minus 2455'
Post Decorah	4785-5010'	Cherty dolomite.	225'
	The basal 20' appear to be older than the base of this series in 13-23-30 and in 21-19-23.		
Decorah	5010-5039'	This sand and green shale series is probably Decorah but may be a part of the Miller. Also, the upper part may be an unconformity sand.	29'
~~Miller-Purcell~~	Arbuckle Top 5039'	Penetration 81'	-2709'
	Miller Purcell	5039-5101'	62'
	Cotter ?	5101-5120'	

Arbuckle thicknesses
Miller Purcell 62' or 91'
Cotter No basis for estimate.

Remarks: The Decorah and Arbuckle section are subject to more than one interpretation. The one given above presumes no marked erosion between the Decorah and the Viola. Another interpretation is: Unconformity sand, 5010-5030'; basal Decorah, 5030-5039'; Miller-Purcell, 5039-5120'. We will have to have more wells in this area in order to be certain of the relative age of the sand and green shale.