

TABLE 2  
PUBLISHED OPINIONS AS TO THE AGE OF THE PHOSPHORIA FORMATION 1/

47-2

System	Carboniferous		Carboniferous or Permian	Permian			
	Pennsylvanian		Wolfcamp	Leonard	Guadalupe		Ochoa
Series	Moscovian	Geschehen	Sakmarian	Artinskian	Kungurian	Kazanian	Tartarian
Fusulinid zones	Fusulina	Trilicites	Pseudoschrageria	Parafusulina		Polydiexodina	
Ammonoid zones	Uddenites		Properrinites	Perrinites	Maagenoceras	Timonites	Cyclolobus
Girty, 1910		"Geschehen"					
Girty(?), 1912			"?Permian"				
E. B. Branson, 1916	"Moscovian"						
Girty, 1927				"Artinskian"			
C. C. Branson, 1930		"Late Pennsylvanian-Lowermost Permian"					
R. E. King, 1930					"Kord"		
J. Steele Williams, 1932							
Miller and Cline, 1934					"Kord"; "may be as old as Leonard"		
Licharew, 1937 (in Williams, 1938)					Equivalent to Irghina beds		
C. C. Branson, 1939			"Lower Permian"				
A. A. Baker and J. Steele Williams, 1940						"Younger than Salob"	
Miller and Furnish, 1940							
E. B. Branson and C. C. Branson, 1941			"Lower but not Lowermost Permian"				
Frenzel and Mundorff, 1942			As old as Wolfcamp				
Thompson, Wheeler and Hazzard, 1946				"Upper Wolfcampian" but "younger than the type section of the Wolfcamp formation"			

1/ Because the classification of the Permian has changed from time to time, the various age determinations, especially those expressed in terms of "Lower, Middle, or Upper Permian," are difficult to compare with one another. An effort has been made to show the age limits as the author intended them in terms of the Permian classification in existence at the time, but, to avoid misrepresentation of the author's opinion, his own designation is quoted wherever possible. The Geological Survey has not made any official correlation of the provincial Permian series of West Texas with those of Russia; that given here is taken from C. O. Dunbar, The type Permian: its classification and correlations. Amer. Assoc. Petroleum Geologists Bull. vol. 24, p. 266, 1940.