LESSEE Phillips Petroleum Company. LESSOR Osage Tribe — Indians (N.S.Norman)

WELL NO. 13 NE SEC. 11 T. 27 R. 5 OSAGE COUNTY

FORMATION RECORD

02647

From	To	Feet	Note each change in formation, i. e., sand, lime, shale, sandy shale, etc. Note character of each formation, i. e., color, hard, soft, caving, etc. Underreamed? Note contents of each formation, i. e., oil, gas, water, and kind of water—salty, etc.	
Surface	8	8	Cellar	
	8	20	Clay, red soft	
	20	30	Lime, white hard	
	30	100	Shale, red soft	
	100	175	Lime, white hard	
	175	180	Shale, blue soft	
	180	200	Lime, white hard	
	200	210	Shale, light soft	
	210	235	Lime, white hard	
	235	245	Shale, white soft	
	245	265	Lime, white hard	
	265	270	Shale, blue soft	
	270	280	Lime, white hard	
	280	290	Slate, blue soft	
	290	300	Lime, white hard	
	300	325	Shale, white soft	
	325	335	Lime, white hard	
	335	390	Shale, blue soft	3 B. W.
	390	405	Sand, white soft	
	405	415	Lime, white hard	
	415	485	Slate, blue soft	
	485	495	Lime, white hard	
	495	575	Shale, blue soft	
	575	605	Lime, white hard	
	605	610	Shale, white soft	
	610	620	Lime, white hard	
	620	625	Shale, blue soft	
	625	675	Lime, shells, white med.	
	675	685	Shale, light soft	
	685	700	Lime, white hard	
	700	710	Shale, blue soft	
	710	720	Lime, white hard	
	720	740	Slate & shells, light med.	
	740	745	Red rock, soft	
	745	755	Lime, white hard	
	755	760	Shale, blue soft	
	760	765	Lime and water, white hard	765' - 8 B. per hr.
	765	785	Lime, white hard	
	785	795	Shale, blue soft	
	795	825	Sand, white soft	H. F. W.
	825	835	Sand and slate, dark soft	15½ - 830' SL
	835	870	Shale, blue soft	
	870	890	Sand, white soft	H. F. W.
	890	900	Shale, blue soft	
	900	910	Lime, white hard	
	910	940	Shale, grey soft	
	940	950	Lime, white hard	