

Susie Unruh #1
 Center W/2 SW/4 NW/4 Sec. 17-20S-15W
 Barton County, Kansas
 Helmerich & Payne, Inc.

15.009 .00972.0000

Commenced: September 25, 1941
 Completed: October 14th, 1941

Shale	0	70	Lime	3558	3718
Shale and streaks of sand	70	490	Lime and streaks of shale	3718	3783
Sand	490	630	Shale and lime streaks	3783	3806
Red bed and shale	630	685	Arbuckle lime	3806	3829
Shale and shells	685	715	Lime	3829	3867
Red bed w/streaks of shale	715	1120	Lime, streaked w/chert	3867	3878
Anhydrite	1120	1155			
Shale	1155	1352	TOTAL DEPTH	3878	
Shale and lime shells	1352	1555			
Shale and shells	1555	1610			
Lime and shale breaks	1610	1690			
Shale and lime shells	1690	1765			
Shale and lime streaks	1765	1935			
Lime, streaks of shale	1935	1990			
Shale and lime	1990	2125			
Sandy lime and shale	2125	2165			
Hard lime	2165	2180			
Sandy lime, streaks of shale	2180	2260			
Lime, hard	2260	2280			
Broken lime	2280	2330			
Hard lime and streaks of shale	2330	2385			
Red shale and streaks of lime	2385	2440			
Broken lime	2440	2565			
Broken lime and red shale	2565	2675			
Shale and lime	2675	2895			
Shale and broken lime	2895	2940			
Lime	2940	3025			
Lime and shale	3025	3100			
Lime	3100	3145			
Broken lime and shale streaks	3145	3180			
Broken lime	3180	3196			
Topeka lime	3196	3250			
Lime	3250	3275			
Lime and streaks of shale	3275	3350			
Lime and shale breaks	3350	3408			
Lime	3408	3480			
Shale and lime streaks	3480	3499			
Shale and lime	3499	3507			
Lime	3507	3512			
K. C. Lime	3512	3524			
K. C. Lime, streaks of chert	3524	3558			

CASING RECORD

8-5/8" O. D. Surface Casing set at 709' and cemented with 300 sacks of cement.

5-1/2" O. D. Casing set at 3878' and cemented with 180 sacks of cement.

STATE OF OKLAHOMA)
) ss
 COUNTY OF TULSA)

I hereby affirm that the above and foregoing is a true and correct copy of the log of our Susie Unruh Well #1, located in the Center of the West Half of the Southwest Quarter of the Northwest Quarter of Section 17, Township 20 South, Range 15 West, Barton County, Kansas.

HELMERICH & PAYNE, INC.,
 By William P. Payne
 Treasurer

Subscribed and sworn to before me, a Notary Public, this 13th day of October, 1942.

Lee Griffin
 Notary Public

My commission expires July 22nd, 1943

PLUGG
 FILE SEC 17-20-15W
 BOOK PAGE 51 LINE 6

