

Empire Gas & Fuel Co. Ed Varner No.31 17-28S-4E

BUTLER COUNTY, KANSAS

5-22-18 - 7-22-18 Init.Prod. 200 Bbls.1st 24 Hrs.

1200' S. - 1400'E.

Lime	16	16	Lime	18	1488
"	12	28	Slate	147	1635
"	47	75	Lime	50	1685
Slate	5	80	Sand	30	1715
Lime	5	85	1 Bailer Water Per Hr.		
Red Rock	7	93	Lime	85	1800
Lime	13	105	Lime	45	1845
Slate	10	115	Slate	35	1880
Lime	15	130	Slate	10	1890
Slate	2	138	Lime	10	1900
Red Rock	7	145	Slate	75	1975
Slate	20	165	Slate	15	1990
Lime	10	175	Oil Sand	10	2000
Slate	15	190	Lime	20	2020
Slate	70	260	Lime	40	2060
Slate	9	269	Sand	10	2070
Water Sand	21	290	2 Bailers Water Per Hr.		
Slate	10	300	Lime	30	2100
Slate	4	304	Sand	15	2115
Water Lime	4	308	3 Bailers Water Per Hr.		
Slate	32	340	Lime	50	2165
Slate	15	355	"	65	2230
Lime	15	370	Slate	50	2280
Slate	5	375	Lime	35	2305
Lime	5	380	Slate	15	2320
Slate	30	410	Lime	40	2360
Lime	10	420	Slate&Sand	56	2416
Slate	32	452	Top Varner Sand		2403
Slate	28	480	Lime	2416	2465
Gas Sand	5	485	Water Sand	2465	2495
Slate	5	490	Sand	2495	2555
Lime	5	495	Oil "	2555	2560
Slate	133	628	Lime	2560	2650
Slate	92	720	Sandy Lime	2650	2685
Slate	12	732	Sand	2685	2860
Lime	30	762	Red Sand	2860	2865
Slate	53	815	Granite	2865	3100
Slate	85	900			
Lime	25	925	-1 Bailer Water per Hr.		
Slate	65	990			
Slate	80	1070			
Lime	30	1100			
Lime	15	1115			
Gas Sand	2	1117			
Lime	28	1145			
Slate	15	1160			
Slate	54	1214			
Lime	11	1225			
Slate	10	1235			
Slate	15	1250			
Lime	35	1275			
Lime	57	1332			
Lime	8	1340			
Slate	50	1390			
Gas Sand	15	1465			
Lime	20	1425			
Slate	20	1445			
Lime	15	1460			
Slate	10	1470			

CASING

20"	19'
15 1/2"	420'
12 1/2"	1332'
10"	2020'
8 1/2"	2416'