

LOG OF WELL

17-29-10E

Company Arkansas Nat. Gas Co. Farm Oliver Well No. 1

State Kansas County Elk S. 17 T. 29 R. 10

Commenced Drilling 2-16-22 Completed 5-3-22 Elev. \_\_\_\_\_

Shot \_\_\_\_\_ Qts. from \_\_\_\_\_ to \_\_\_\_\_ I. P. \_\_\_\_\_ R. P. \_\_\_\_\_

Casing: 15 1/2" 24' Casing: 12 1/2" 535' Casing: 10" 301'

Casing: 8" 1300' Casing: 6" 1930' Casing: 5 3/16" 2080'

Tubing \_\_\_\_\_ Caged at \_\_\_\_\_ Packer at \_\_\_\_\_

Soil		15	Shale Blue	20	1280
Lime White	5	20	Sand gas	12	1272
Slate blue	15	35	Shale Black	9	1280
Sand Water	5	40	Lime White	15	1295
Slate White	70	110	Shale White	40	1335
Lime	15	125	Lime 1 B. Water	125	1460
Shale White	55	180	Slate Black	5	1465
Lime Grey	20	200	Lime White	20	1485
Shale Blue	60	260	Sand 1 B. water	5	1490
Lime	15	275	Lime White	30	1520
Slate White	30	305	Slate Brown	10	1530
Red Rock	10	315	Slate White	75	1605
Slate Blue	5	320	Lime White	30	1635
Lime	30	350	Shale White	65	1700
Shale grey	15	365	Lime	40	1740
Lime	5	370	Slate Black	5	1745
Red Rock	5	375	Lime White	50	1795
Slate White	55	430	Slate Black	60	1855
Lime White	10	440	Lime	10	1865
Slate Blue	25	465	Slate White	50	1915
Shale White	20	485	Red Rock	10	1925
Lime Grey	55	540	Slate Black	5	1930
Slate Black	15	555	Broken Sand	5	1935
Shale Blue	35	590	Shale dark	70	2005
Lime	10	600	Red Rock	10	2015
Shale Blue	15	615	Shale White	20	2035
Slate White	10	625	Shale Black	51	2086
Red Rock	18	635	Sand Oil	19	2095
Slate White	25	660			
Shale Blue	5	665			
Lime White	20	685			
Sand hole full					
Water at 635	95	780			
White slate	40	820			
Lime White	10	830			
Shale blue	30	860			
Lime White	20	880			
Slate White	60	940			
Lime	10	950			
Slate White	10	960			
Lime White	150	1110			
Shale Blue	15	1125			
Lime White	15	1140			
Shale White	85	1225			
Lime White	15	1240			

Later Drilled to 2491'

2095  
1131  
9644

003420

Moore

GEOLOGICAL DEPARTMENT  
SOUTHWESTERN GAS COMPANY  
INDEPENDENCE, KANSAS

17-29-10E

Company **Arkansas Nat. Gas Co.**

S. T. R. **17-29-10**  
County **Elk**  
State **Kansas**  
Lease and Well No. **Oliver #1**

Contractor

Drilling Commenced **2-16-22**

Drilling Completed **5-3-22**

Initial Production

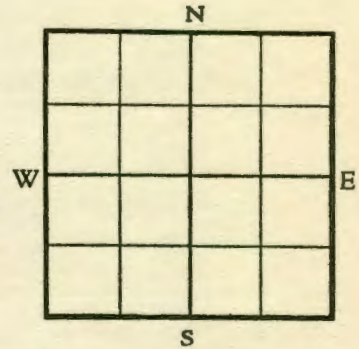
Initial Rock Pressure

Location

Casing **94'-15 1/2"**  
**1300'-6"**

**535'-12 1/2"**  
**1930'-6"**

**801'-10"**  
**2080'-5-3/16"**



Driller's Record of Formations

soil		15	shale blue	15	1125
lime white	5	20	lime white	15	1140
slate blue	15	35	shale white	85	1225
sand water	5	40	lime white	15	1240
slate white	70	110	shale blue	20	1260
lime	15	125	sand gas	12	1272
shale white	55	180	shale black	8	1280
lime grey	20	200	lime white	15	1295
shale blue	60	260	shale white	40	1335
lime	15	275	lime 1 B. water	125	1460
slate white	30	305	slate black	5	1465
red rock	10	315	lime white	20	1485
slate blue	5	320	sand 1 B. water	5	1490
lime	30	350	lime white	30	1520
shale grey	15	365	slate brown	10	1530
lime	5	370	slate white	75	1605
red rock	5	375	lime white	30	1635
slate white	55	430	shale white	65	1700
lime white	10	440	lime	40	1730
slate blue	25	465	slate black	5	1745
shale white	20	485	lime white	50	1795
lime grey	55	540	slate black	60	1855
slate black	15	555	lime	10	1865
shale blue	35	590	slate white	50	1915
lime	10	600	red rock	10	1925
shale blue	15	615	slate black	5	1930
slate white	10	625	broken sand	5	1935
red rock	15	635	shale dark	70	2005
slate white	25	660	red rock	10	2015
shale blue	5	665	shale white	20	2035
lime white	20	685	shale black	51	2086
sand hole full			sand oil	9	2095
water at 685	95	780			
white slate	40	820			
lime white	10	830			
shale blue	30	860			
lime white	20	880			
slate white	60	940			
lime	10	950			
slate white	10	960			
lime white	150	1110			

17-29-10E  
 elev 1136

Log of Oliver WELL No 1 located 17-29-10 NR  $\frac{1}{2}$  SE  $\frac{1}{2}$   
 Drilled by Arkansas Fuel Oil-  
 Paul Smith, Howard, Kansas. - Manager -

Soil	15 ft	
Lime	5	
Slate	15	
SAND	5	- Water
Slate	70	
Lime	15	
Slate	55	Set 15 $\frac{1}{2}$ inch casing at 94 ft
Lime	20	
Slate	60	
Lime	15	
Slate	30	
Red Rock	8	
Blue Slate	5	
Lime	17	
Lime	15	
Slate	15	
Blue Slate	5	
Red Rock	5	
Blue Slat	5	
Lime	10	
Slate	40	
Lime	10	
Slate	25	
Shale	20	
Lime	15	
Shale	35	
Lime	5	
Shale	15	
12 $\frac{1}{2}$ inch set at 660 feet		
Red Rock	15	
Blue Shale	20	
Lime	10	
Blue Shale	15	
White Shale	10	
Red Rock	10	
White slate	25	
Blue Shale	5	
White Slate	20	
SAND WITH Water	95 ft	
Casing set 10 in 801 feet		
White slate	40	
Lime	10	
Slate	30	
Lime	20	
Slate	60	
Lime	10	
Slate	10	
White lime	150	
Shale	15	
Lime	15	
Slate	20	
Shale	10	
Lime	15	
Black shale	20	
SAND (GAS)	12	Stopped at 1265 - 4 million-
Slate	12	
Slate	5	
Lime	10	
CASING 2 $\frac{1}{2}$ set at 1302 feet Gas mudded off		
Shale	20	
Slate	6	
Slate	5	
Lime	5	
Slate	5	

003421