

GEOLOGICAL DEPARTMENT
SOUTHWESTERN GAS COMPANY
INDEPENDENCE, KANSAS

5-33-96

Company

S. T. R. 5-33-9
County Chautauqua
State Kansas
Lease and Well No. Garr #1

Contractor M. Murphy Oil Company

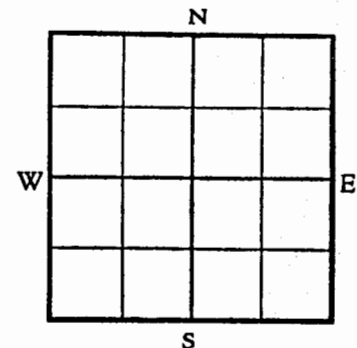
Drilling Commenced April 23, 1914 Drilling Completed August 14, 1914

Initial Production

Initial Rock Pressure

Location NE cor.

Casing



Driller's Record of Formations

13" casing	30	black slate	1844
red and slate	128	sandy lime	1900
lime	135	oil	1912 to 1918
red slate	150	black slate	1924
red slate	335 mixed with lime	sandy lime	1933
lime	375 shells	oil	1940 to 1955
red cave	425	black lime	1967
gray slate	480	gray lime	1973
sand	520 10" csg. at 530'	black slate	1984
broken sand and		gray slate	2026
slate	600	black slate	2032
lime	635	sand	2036 little gas x
red cave	660	black slate	2052 top oil 1
shale	785	sand	2070 screw in
sand	790 with water		
sand	980 " "		
cap rock	1245 6-5/8" at 1090		
broken shale	1350		
cap rock	1355		
sand	1460 HPW		
shale	1510		
sand	1515		
lime	1535		
shale	1550		
lime	1570		
gas sand	1600		
sand	1605 show of oil		
sand	1625		
lime	1679		
sandy lime	1679		
black slate	1688		
gray lime	1708		
black slate	1714		
white lime	1720 sandy		
white shale	1732		
black slate	1738		
white lime	1810		
white lime	1830		

5-33-9
23 15
22 55
6

Log of Gar Well. NE Corner Sec 5-33-9 Chautauqua Co. Kansas.
Commenced April 23.
Completed Aug 14-1914.
Mitchell Murphey Owner.

Red and Slate	128	Lime	1824
Lime	135	Shale	1830
Red Slate	150	Lime	1844
Grey Slate	335	Shale	1900
Lime	375	Sandy Lime	1924 Bartlesville
Red Cave	425	Slate Very Black	1933 -34'
Grey Slate	480	Sandy Lime Sho 0	1967
Sand	520	Lime	1973
Set 10" Bad cave		Lime	1984
Broken sand & Slate	600	Slate	2026
Lime	635	Slate	2032
Red Cave	660	Shale	2036
Shale	785	Sand Gas	2052 Tucker
Sand H. 2 O.	790	Slate	2091
Set 8" casing		Broken Sand & Slate	2112
Sand Lime Water	980	Grey Slate	2132
Underreamed 8" to	891	Broken Sand & Slate	2146
Slate and Broken Sand	1240	Shale	2160
Set 6-5/8" 1090		Broken Sand	2174
Cap Rock	1245	Slate	2188
Black Slate	1350	Broken Shale	2202
Cap Rock	1355	Slate	2225
Oil Sand	1395 -40'	Black Slate	2255 Burgess
Good show oil		Lime Oil	2318 Miss L
Stray sand		T. D.	
Sand full water	1455		
Lime	1460		
Shale Underreamed			
6-5/8 to	1505 10' 1510		
Sand Show Oil	1515		
Lime	1535		
Shale Underreamed 6-5/8	1540 - 1550		
Lime	1567		
Shale Break	1570		
Lime	1580		
Sand gas 3 Mill	1600		
Sand Sho Oil	1605 45'		
Sand	1625		
Lime Sandy	1679		
Lime Sandy	1688		
Slate	1708		
Lime	1714		
Slate	1720		
Sandy Lime	1732		
Shale	1758		
Shale	1810		

1625
1580
45