

GEOLOGICAL DEPARTMENT  
SOUTHWESTERN GAS COMPANY

22-23-15E  
25

INDEPENDENCE, KANSAS

H P4

LOG OF WELL

Company Aurora Oil + Gas? Farm Harder Well No. 13  
 State Kansas County Woodson S. 22 T. 25 R. 15  
 Commenced Drilling \_\_\_\_\_ Completed 1-23-19 Elev. \_\_\_\_\_  
 Shot \_\_\_\_\_ Qts. from \_\_\_\_\_ to \_\_\_\_\_ I. P. \_\_\_\_\_ R. P. \_\_\_\_\_  
 Casing: 750' 8 1/4" Casing: 1368' 6 1/4" Casing: \_\_\_\_\_  
 Casing: \_\_\_\_\_ Casing: \_\_\_\_\_ Casing: \_\_\_\_\_  
 Tubing \_\_\_\_\_ Caged at \_\_\_\_\_ Packer at \_\_\_\_\_  
 Contractor \_\_\_\_\_

soil	2	limo	1020
sand	6	shale	1024
shale	34	limo	1040
sand	37	shale	1045
shale	90	lime	1070
lime	95	shale	1105
shale	105	sand	1125
lime	115	shale	1151
shale	235	lime	1453
lime	330	shale	1461
shale	334	lime	1463
lime	394	sand	1467 oil
shale	400	limo	1489
lime	400		
sand	515		
lime	535		
shale	539		
lime	543		
shale	573		
red rock	580		
shale	602		
lime	644		
shale	648		
lime	701		
shale	705		
lime	731		
shale	736		
sand	749		
shale	909		
lime	939		
shale	1010		

Compl. 2-10-20