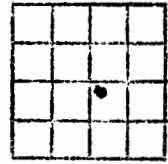


Company- NATIONAL COOPERATIVE REFINERY ASS'N
Farm- Michel "A" No. 10SEC. 2 T. 15 R. 14W
NW SW SETotal Depth. 2317
Comm. 10-16-51 Comp. 12-4-51
Shot or Treated.
Contractor. Carter Drilg Co.
Issued. 1-19-52County Russell
KANSAS13" CASING: 373' 5" 8 5/8" 2082'
10 3/4" 745' 7" 2310'

Elevation. 1734 (m)

Production. Pump 70 bbls

Figures indicate Bottom of Formations.

cellar	7	shale	1805
post rock	20	lime	1820
shale	35	shale	1835
shale blue	40	lime shell, shale	1880
red	50	lime, small shale brks	1930
lime	60	lime	1950
shale	80	shale	1960
lime	90	lime 1/2 BWPH	1990
shale sdy	105	red rock	2010
4 BWPH @ 90-95		lime	2055
red rock	110	shale	2070
shale	140	lime shell & gas sand	2075
red rock	150	(Indian Cave Sand at 2075'	
shale	155	estimated approximately 1	
red rock	185	million cubic feet of gas	
shale blue	245	Blowed self to 2082', ran	
shale	270	8 5/8" casing at 2082')	
sand	290	shale blue	2087
HFW @ 270-90		red sand	2090
iron	295	(Water broke in,	
shale, iron	305	lowered pipe 18')	
shale	315	sand	2100
shale blue	340	lime	2110
shale	360	10 BWPH @ 2082-2110	
shale blue	375	sand	2115
3 BWPH @ 510-20		lime	2118
3 BWPH : 580-90		shale	2125
red rock	730	lime	2130
3 BWPH @ 695-705		shale	2133
gyp hard	735	lime brkn	2140
lime	745	lime	2150
anhydrite	745 ?	(Picked up pipe and under	
lime	760	reamed 7', put in 3 2'	
red rock	920	joints, water shut off.)	
shale blue	980	lime	2155
red rock	1025	(Water broke in around	
shale blue	1135	8 5/8" pipe, lowered	
salt	1360	pipe and shut off wtr.)	
shale	1370	lime	2160
salt	1425	shale	2165
lime	1460	lime	2170
shale	1490	shale	2220
lime, shale	1500	lime	2230
lime	1525	shale	2257
shale	1535	lime	2271
red rock	1555	shale	2290
lime	1565	red rock	2295
shale blue	1575	shale	2297
lime	1585	lime	2305
shale blue	1590	red rock	2308
shale	1600	shale	2309
lime	1645	Tarkio	2317
red rock	1670	Total Depth	
lime	1695		
shale	1705	Tops:	
lime	1765	Tarkio	2309
shale	1775		
lime	1795		