

Casing Record

8 5/8

225' Cemented
w/150 sacks

Location: SW NW NE
Section: 23-31-3E
Cowley County, Kansas
Farm: Waiker #1
Well Owner: National Associated
Petroleum Co.
Contractor: White & Ellis Drig., Inc
Started: 4/12/62
Completed: 4/21/62

T.D. 3414'
Kelly Bushing Measurement 5' above ground level.

FORMATION	DEPTH
Shale	0-30
Lime & Shale	128
Shale	165
Shale & Lime	245
Lime & Shale	485
Shale & Lime	860
Sand & Shale	970
Shale & Lime stks.	1400
Lime & Shale stks.	1625
Shale & Lime	1720
Lime	1735
Shale & Lime stks.	1955
Shale	2078
Lime	2083
Sand	2095
Sand & sdy. Shale	2259
Shale	2330
Sand	2395
Sand & Shale	2495
Lime	2745
Shale	2808
Lime	2829
Shale	2849
Lime	2925
Shale	2993
Lime	3003
Sand	3030
Shale	3066
Lime	3316
Shale	3393
Lime	3414

TOPS

Kansas City	2495
Mississippi	3101 3067
Arbuckle	3393