

*Leavitt*

MID-CONTINENT PETROLEUM CORPORATION  
WELL RECORD - C. H. DOUGHERTY  
WELL NO. 1

NW $\frac{1}{4}$  Sec. 33-17S-10W, Ellsworth County, Kansas  
10' from South and West lines  
Drilling commenced 8-30-39; well completed 10-4-39.  
Drilling contractor, Mac & Stauffer  
Potential, 104 barrels.

FORMATION RECORD

Soil	0	2
Clay	2	10
Shale & sand	10	75
Sand	75	90
Blue shale	90	160
Shale & shells	160	200
Shale	200	250
Hard shells	250	285
Blue shale	285	350
Red rock	350	425
Shale & shells	425	555
Anhydrite, broken	555	600
Shale & shells	600	855
Shale & lime shells	855	990
Salt	990	1170
Shale	1170	1240
Lime	1240	1340
Broken lime	1340	1380
Shale	1380	1410
Shale & lime shells	1410	1625
Sand	1625	1640
Lime	1640	1733
Sandy lime	1733	1822
Shale & shells	1822	1940
Broken lime	1940	1970
Shale	1970	2100
Broken lime	2100	2189
Shale	2189	2200
Broken lime	2200	2210
Shale	2210	2260
Lime	2260	2295
Shale	2295	2315
Lime	2315	2335
Broken lime	2335	2370
Lime	2370	2380
Broken lime	2380	2427
Shale	2427	2480
Broken lime	2480	2500
Lime	2500	2554
Lime	2554	2570
Topeka lime	2570	2840
Broken lime	2840	2865
Lime	2865	2935
Shale & shells	2935	2955
Lime	2955	2983
Hard lime	2983	3038
Soft lime	3038	3220
Lime & shale breaks	3220	3237
Cherty lime	3237	3240 $\frac{1}{2}$
Lime, Chert & green shale	3240 $\frac{1}{2}$	3248
Lime	3248	3249
Arbuckle lime	3249	3259
Hard Arbuckle lime	3259	3270
Arbuckle lime	3270	3270 $\frac{1}{2}$
Arbuckle lime	3270 $\frac{1}{2}$	3281 TD

CASING RECORD

SIZE	CASING SPOT	CEMENT
10 $\frac{1}{2}$ " 32# SH LW	<del>241' 8"</del> 242' 10"	200 sacks
7" OD 24# New SS	<del>3249'</del> 3250' 2"	250 sacks