

EMPIRE OIL & REFINING CO.
Crawford No. 3.

Sec. 2 T. 14 R. 15W
NW SW SW
996' N-330' E of SW Cor.

County, Russell

Total Depth. 3286'
Comm. 3-22-36. Comp. 4-24-36.
Shot or Treated.
Contractor. Herman Trapp.
Issued. 5-23-36.



CASING.

20 " 19'10" Pulled
15 1/2 " 465' UR 591'8" Pulled
12 1/2 " 896'
10 " 2500' Sand line. Pulled
8 1/4 " 3041' SIM Pulled
6 5/8 " 3268' SIM UR 3283'

Elevation.

Production. 750 B. 24 hrs.

Figures indicate Bottom of		Formations	
cellar	10	shale grey	1985 Top Oswald 3033' Corr.
yellow clay	20	lime	2005 Corr. 3035-3041 SIM
lime	28	shale	2020 lime 3048
mud blue	75	lime	2030 lime(S.O. 3090-95') 3095
slate blue	130	lime grey	2065 shale blue 3105
mud blue	160	red rock	2070 lime grey 3130
sand	170	lime grey	2075 lime sandy 3135
mud	185	lime	2090 lime 3160
sand	210	shale	2100 sandy lime 3165
mud	235	lime	2135 S.O. 3160-65
sand	250	red rock	2150 shale blue 3170
red rock	260	lime	2160 lime 3205
slate blue	270	lime grey	2165 red rock 3210
sand	315	lime	2175 lime grey 3230
slate blue	370	shale	2180 shale blue 3235
iron lime	385	lime	2205 lime grey 3262
mud	395	shale blue	2215 shale grey 3268
slate blue	400	red rock	2220 Correction 3268-3268 SIM
mud blue	410	lime	2240 lime 3273
sand	425	lime grey	2245 shale grey 3280
iron	428	shale grey	2255 lime & shale 3283
mud blue	435	lime grey	2270 lime 3284
sand	450	lime	2280 Top Gorham 3284'
slate blue	465	shale grey	2310 Gorham sand 3286
sand	530	lime	2315 Total Depth
red rock	565	shale blue	2325
sand	580	lime	2345 1800' oil 1 hr, 5 min.
red rock	685	lime grey	2365 2200' oil 2 hrs.
sand	700	slate blue	2380
red rock	755	lime	2390
Top Anhydrite 891		shale blue	2400
sand	765	lime	2415 12 BW 185-210
red rock	888	shale	2425 HFW 235-250
lime	938	lime	2435 287' wtr in hole 457'
red rock	1085	shale	2445 HFW 485
slate blue	1125	lime	2460 3 BWPH 685-700
red rock	1180	shale grey	2497 5 BW 755-765
slate blue	1275	lime	2515 1 BWPH 3048-55
salt	1290	shale blue	2525 1 BWPH 3130-35
salt brown	1355	shale grey	2535
salt	1525	lime	2560
shale grey	1535	shale	2565
slate & shells	1565	lime	2585
lime	1575	shale & lime	2600
shale grey	1580	shale	2610
lime	1605	lime	2615
shale blue shells	1625	shale, shells, grey	2720
shale shells grey	1670	shale	2725
red rock	1680	lime	2740
lime	1725	shale	2748
shale	1745	Topeka lime	2755
lime	1775	lime	2960
shale	1785	lime grey	2970
red rock	1800	shale black	2974
shale grey	1810	lime grey	2978
lime	1845	shale grey	2992
shale grey	1855	lime Dodge	3008
lime	1935	shale red	3018
red rock	1950	shale blue	3028
lime grey	1960	lime Oswald	3030
lime	1975	lime K.C.	3035

WATER RECORD.