

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)

Form C-122D
Adopted 9-1-65

COMPANY Getty Oil Company LEASE Getty Federal 34 WELL NO. 1 DATE

LOCATION: Unit Section 34 Township 22S Range 26E

L 9268 H 9268 L/H 1.000 G .712 % CO₂ 0.95 % N₂ 0.11 % H₂S 0

d 1.995 F_r .018231 GH 6598.8 P_{cr} 668 T_{cr} 395
1st Rate 2nd Rate 3rd Rate 4th Rate
TABLE IX & X TABLE IX & X

LINE	1st	2nd	1st	2nd	1st	2nd	1st	2nd		
1 Q _m	.027	.027	.038	.038	.065	.065	.088	.088		
2 T _w (W.H. °R)	534	534	534	534	534	534	534	534		
3 T _s (B.H. °R)	645	645	645	645	645	645	645	645		
4 T = ($\frac{T_w + T_s}{2}$)	589.5	589.5	589.5	589.5	589.5	589.5	589.5	589.5		
5 Z (Est.)	.817	.799	.818	.800	.820	.802	.838	.821		
6 T _Z	481.6	471.0	482.2	471.6	483.4	472.8	494.0	484.0		
7 GH/T _Z	13.701	14.010	13.684	13.992	13.651	13.957	13.358	13.634		
8 e ^s (Table XIV)	1.672	1.691	1.671	1.690	1.668	1.688	1.650	1.667		
9 1-e ^s (Table XIV)	.402	.409	.401	.408	.401	.408	.394	.400		
10 P _t (11)	1413.2	1413.2	1403.2	1403.2	1378.2	1378.2	1198.2	1198.2		
11 P _t ² /1000	1997.1	1997.1	1969.0	1969.0	1899.4	1899.4	1435.7	1435.7		
12 F _r (Table XV)	.018231	.018231	.018231	.018231	.018231	.018231	.018231	.018231		
13 F _c = F _r T _Z	8.780	8.587	8.791	8.598	8.813	8.619	9.006	8.823		
14 F _c Q _m	.237	.232	.334	.327	.573	.560	.793	.776		
15 L/H (F _c Q _m) ²	.0562	.0538	.1116	.1067	.3281	.3138	.6281	.6029		
16 F _w =L/H (F _c Q _m) ² (1-e ^{-s})	.0226	.0220	.0448	.0436	.1315	.1279	.2475	.2413		
17 P _w ² = P _t ² + F _w	1997.2	1997.2	1969.0	1969.0	1899.6	1899.6	1435.9	1435.9		
18 P _s ² = e ^s P _w ²	3338.5	3377.4	3689.4	3327.6	3169.4	3206.0	2369.6	2394.3		
19 P _s	1827.2	1837.8	1813.7	1824.2	1780.3	1790.5	1539.4	1547.4		
20 P = ($\frac{P_t + P_s}{2}$)	1620.2	1625.5	1608.4	1613.7	1579.2	1584.4	1368.8	1372.8		
21 P _r = (P/P _{cr})	2.42	2.43	2.41	2.41	2.36	2.37	2.05	2.05		
22 T _r = (T/T _{cr})	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49		
23 Z (Table XI)	.799	.799	.800	.800	.802	.802	.821	.821		