

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)

C-122D
Adopted 9-1-65

COMPANY YPC LEASE Leefburgville Canyon Unit WELL NO. 8 DATE 3-23-81

LOCATION: Unit K Section 10 Township 24S Range 24E

L 7010 (10470) H 7010 (10470) L/H 1.000 G 0.589 % CO₂ 1.34 % N₂ 0.19 % H₂S NIL
238-10436 (398)-41535
442-34 (16.0) 544
10470 (4019) = 42019
20042 F_r 0.1647 GH 4178.9 P_{cr} 826 T_{cr} 405.5
4.66% H₂O TABLE IX & X

LINE	51	1	2	3	4				
1 Q _m	—	0.552	0.741	1.146	1.397				
2 T _w (W.H. °R)	520	535	536	537	538				
3 T _s (B.H. °R) 27000'	590	594	594	593	593				
4 T = $\frac{T_w + T_s}{2}$	555	564.5	565	565	565.5				
5 Z (Est.)	1.685	1.711	1.720	1.758	1.799				
6 TZ	380.175	401.36	406.80	428.27	451.83				
7 GH/TZ	10.8605	10.287	10.150	9.6409	9.1381				
8 e ^s (Table XIV)	1.5027	1.4707	1.4632	1.4355	1.4087				
9 1-e ^s (Table XIV)		0.3201	0.3166	0.3034	0.2901				
10 P _i	2174.2	2016.2	1893.2	1527.2	1226.2				
11 P _t 2/1000	4727.15	4665.1	3584.2	2533.3	1503.6				
12 F _r (Table XV) 0.575	0.40727	0.38577	0.38061	0.36153	0.34268				
13 F _c = F _r TZ		616104	67000	70536	74416				
14 F _c Q _m		3.649	4.965	8.0034	10.396				
15 L/H (F _c Q _m) ²		13.315	24.65	65.342	108.076				
16 F _w = L/H (F _c Q _m) ² (1-e ^s)		4.2	7.8	19.8	31.3				
17 P _w ² = P _t ² + F _w	7103.5	4069.3	3592.0	2352.1	1534.9				
18 P _s ² = e ^s P _w ²	7103.5	5924.7	5255.8	3376.4	2162.2				
19 P _s 27000'	2665.2	2446.4	2292.6	1857.5	1490.4				
20 P = $\frac{P_t + P_s}{2}$	2419.7	2231.3	2092.9	1682.4	1348.3				
21 P _r = (P/P _{cr})	2.929	2.701	2.533	2.037	1.6328				
22 T _r = (T/T _{cr})	1.369	1.392	1.393	1.393	1.394				
23 Z (Table XI)	0.685	0.711	0.720	0.758	0.799				

* P₅ @ 10480' (41522) 4187.2 3968.4 3814.6 3359.5 2992.4