

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)

C-122D
Adopted 9-1-65

COMPANY YPC LEASE Rio Pequeno 150 Acres WELL NO. 2 DATE 10-3-80

LOCATION: Unit F Section 2 Township 19S Range 25E

27/8 9173(5.358) = 54.55 5 1/2 - 2 1/8 5 (18.00) = 90 2.4427 2 1.000 6 2.542 0.59 0.19 0.22 11.1
9185 H 9185 L/H 1.000 G 2.542 % CO₂ 0.59 % N₂ 0.22 % H₂S 11.1
9185 d 2.4427 F₁ 0.001855 GH 56119.2 P_{cr} 674 T_{cr} 352.5
9185 TABLE IX & X TABLE IX & X

LINE	1	2	3	4					
1 Q _m	31	1	2	3	4				
2 T _w (W.H. °R)	526	530	535	536					
3 T _g (B.H. °R)	614	614	613	613					
4 T = (T _w + T _g) / 2	570	572	573	574	574.5				
5 Z (Est.)	.856	.854	.845	.839	.835				
6 T _Z	437.12	488.49	484.19	481.59	479.71				
7 GH/T _Z	11.1067	11.094	11.192	11.253	11.297				
8 e ^s (Table XIV)	1.5166	1.5159	1.5215	1.5250	1.5275				
9 1-e ^s (Table XIV)		0.3403	0.3428	0.3443	0.3453				
10 P ₁	30542	3016.2	2808.2	2679.2	2530.2				
11 P ₁ 2/1000	9328.1	9097.5	7886.0	7178.1	6401.9				
12 F ₁ (Table XV)	0.41650	0.41602	0.41970	0.42198	0.42363				
13 F ₁ 2 = F ₁ T _Z		4.814	4.7717	4.746	4.7275				
14 F ₁ Q _m		16.069	22.583	30.408	38.099				
15 L/H (F ₁ Q _m) ²		258.22	510.27	924.65	1451.55				
16 F _w = L/H (F ₁ Q _m) ² (1-e ^s)		87.9	174.9	318.4	501.2				
17 P _w ² = P ₁ ² + F _w		9185.4	8060.9	7496.5	6903.1				
18 P _s ² = e ^s P _w ²		14147.0	13924.1	12264.7	11432.1	10544.5			
19 P _s	3761.2	3731.5	3502.1	3381.1	3247.2				
20 P = (P ₁ + P _s) / 2	3457.9	3373.9	3155.1	3030.2	2888.9				
21 P ₁ = (P/P _{cr})	5.130	5.006	4.681	4.496	4.285				
22 T ₁ = (T/T _{cr})	1.617	1.623	1.626	1.628	1.630				