

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)

C-122D
Adopted 9-1-65

COMPANY YPC LEASE Sustem Shore Oil Field WELL NO. 1 DATE 3-25-81

LOCATION: Unit TS Section 17 Township 19-S Range 27-E

L 9900' H 9900' L/H 1000 G 0.630 % CO₂ 1.33 % N₂ 0.70 % H₂S N/A
 d 2.4467 F_T 1.3552 GH 6242 P_{CT} 740.5 T_{CT} 373.5

TABLE IX & X

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LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1 Q _m		2.352	3.349	4.083	6.064																		
2 T _w (W.H. °R)	5210	5413	5415	5416	5417																		
3 T _s (B.H. °R)	6115	6111	6111	6113	6112																		
4 T _s = $\frac{(T_w + T_s)}{2}$	5127.5	5763	5794.5	5794.5	5794.5																		
5 Z (Table X)	0.851	0.824	0.824	0.824	0.824																		
6 T _z	4199.965	4785.943	4785.943	4785.943	4785.943																		
7 Q _z (Table X.V)	13.000	13.255	13.349	13.540	13.720																		
8 e ² (Table X.V)	1.42865	1.4439	1.4550	1.4621	1.4650																		
9 1 - e ² (Table X.V)		0.5315	0.5449	0.5379	0.5349																		
10 P ₁	3109.2	2053.2	2612.2	2262.2	1632.2																		
11 P ₂ = 1000	9912.4	8104.3	8525.5	8122.1	7664.1																		
12 P ₃ = $\frac{P_1 + P_2}{2}$	6048.775	6049.000	6048.775	6048.775	6048.775																		
13 P ₄ = P ₁ + P ₂		4662.05	4662.05	4662.05	4662.05																		
14 P ₅ Q _m		10405	15539	21065	31020																		
15 L/H (P ₅ Q _m) ²		100.22	241.455	478.09	996.61																		
16 P ₆ = L/H (P ₅ Q _m) ² (1-e ⁻⁵)		42.4	95.35	196.04	396.17																		
17 P ₆ ² = P ₆ ² + P _w ²		2211.7	6910.9	5312.5	3054.8																		
18 P ₆ ² = e ⁵ P _w ²	12152.0	13499	11435	8836.0	5042.3																		
19 P ₆	4019.0	3674.1	3321.5	2971.5	2245.5																		
20 P = $\frac{P_1 + P_6}{2}$	3584.4	3266.2	2996.9	2617.4	1938.0																		
21 P _f = (P/P _{at})	5.128	4.663	4.278	3.736	2.768																		
22 T _f = (T/T _{at})	1.546	1.549	1.551	1.552	1.552																		
23 Z (Table XI)	0.831	0.814	0.804	0.795	0.789																		

4586
 8.6
 291.

5081
 8.54
 294
 7.269
 121.204
 1.212.4

100.25
 100.25
 100.25
 100.25

100.25
 100.25
 100.25
 100.25

1.6
 1.6
 1.6
 1.6