

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)

COMPANY 21100000 LEASE 21100000 WELL NO. 15 DATE 10/1/65

LOCATION: Unit L Section 25 Township 21S Range 21E

L 10342 H 10342 L/H 1.000 G 0.000 % CO₂ 0.0 % N₂ 0.0 % H₂S 0.0

d 1.995 F_r 0.08231 GH 0.00000 P_{cr} 669 T_{cr} 302

TABLE IX & X

LINE	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND
1 Q _m	1.238	1.238	1.206	1.206	2.328	2.328	2.328	2.328	2.328	2.328	2.328	2.328	2.328	2.328	2.328	2.328	2.328	2.328	2.328	2.328	2.328	2.328	2.328	
2 T _w (W.H. °R)	637	637	637	637	574	574	574	574	574	574	574	574	574	574	574	574	574	574	574	574	574	574	574	
3 T _g (B.H. °R)	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	
4 T = (T _w + T _g)	1.788	1.519	1.781	1.807	1.776	1.799	1.799	1.799	1.799	1.799	1.799	1.799	1.799	1.799	1.799	1.799	1.799	1.799	1.799	1.799	1.799	1.799	1.799	
5 Z (Est.)	46.13	47.13	45.72	472.4	454.3	467.8	452.0	454.3	452.0	454.3	452.0	454.3	452.0	454.3	452.0	454.3	452.0	454.3	452.0	454.3	452.0	454.3	452.0	
6 TZ	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	
7 CH/TZ	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	
8 e ^s (Table XIV)	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	
9 1-e ^s (Table XIV)	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	1.737	
10 P ₁	2983.2	2983.2	2825.2	2825.2	2693.2	2693.2	2693.2	2693.2	2693.2	2693.2	2693.2	2693.2	2693.2	2693.2	2693.2	2693.2	2693.2	2693.2	2693.2	2693.2	2693.2	2693.2	2693.2	
11 P ₁ 2/1000	8899.5	8899.5	7981.8	7981.8	7253.3	7253.3	7253.3	7253.3	7253.3	7253.3	7253.3	7253.3	7253.3	7253.3	7253.3	7253.3	7253.3	7253.3	7253.3	7253.3	7253.3	7253.3	7253.3	
12 F ₁ (Table XV)	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	0.18231	
13 F ₁ C = F ₁ TZ	8.411	8.411	8.411	8.411	8.411	8.411	8.411	8.411	8.411	8.411	8.411	8.411	8.411	8.411	8.411	8.411	8.411	8.411	8.411	8.411	8.411	8.411	8.411	
14 F ₁ Q _m	10.413	10.413	10.413	10.413	10.413	10.413	10.413	10.413	10.413	10.413	10.413	10.413	10.413	10.413	10.413	10.413	10.413	10.413	10.413	10.413	10.413	10.413	10.413	
15 L/H (F ₁ Q _m) ²	108.43	108.43	108.43	108.43	108.43	108.43	108.43	108.43	108.43	108.43	108.43	108.43	108.43	108.43	108.43	108.43	108.43	108.43	108.43	108.43	108.43	108.43	108.43	
16 F ₁ L/H (F ₁ Q _m) ² (1-e ^s)	46.174	46.174	46.174	46.174	46.174	46.174	46.174	46.174	46.174	46.174	46.174	46.174	46.174	46.174	46.174	46.174	46.174	46.174	46.174	46.174	46.174	46.174	46.174	
17 P _w ² = P ₁ ² + F _w	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	8946.2	
18 F _g ² = e ^s P _w ²	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	15725.2	
19 F _g	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	
20 P = (1 + 1/T _g)	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	3472.3	
21 P ₁ = (P/P _g)	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	
22 T ₁ = (T/T _g)	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	
23 Z (Table XI)	1.819	1.819	1.819	1.819	1.819	1.819	1.819	1.819	1.819	1.819	1.819	1.819	1.819	1.819	1.819	1.819	1.819	1.819	1.819	1.819	1.819	1.819	1.819	

* = P_w

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