

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)

C-122D
Adopted 9-1-85

COMPANY Yates Petroleum Corp LEASE Caseley EV WELL NO. 1 DATE 1-27-77

LOCATION: Unit N Section 30 Township 17S Range 26E

L 8075 H 8075 L/H 1.000 G 0.765 % CO₂ 1.74 % N₂ 1.15 % H₂S N.I.

4 1/2" - 60' (1022) 631.65d 2.0306 F_i 0.616955 GH 6177.4
2 1/2" - 745' (3.95) 31.641
+ 7.0 - 2.5 P_{cl} 672.5 T_{cl} 407
- 1.1 - 3.5
TABLE IX B A

LINE	8075	1	2	3	4	1	2	3	4
1 Q _m	S1	0.612	0.870	1.134	1.594	S1	0.612	0.870	1.134
2 T ₁ (W.H. OR)	522	523	522	522					
3 S ₁ (B.H. OR)	595	591	587	585					
4 T ₁ = (1.5W + 1.5)	553.5	557	555	553.5					
5 Z (Est.)	0.70	0.69	0.68	0.675	0.675				
6 T ₂	390.95	384.33	379.40	373.612	373.612				
7 GH/T ₂	15.801	16.073	16.368	16.534	16.534				
8 e ^s (Table XIV)	1.9055	1.8270	1.8472	1.8589	1.8589				
9 1-e ^s (Table XIV)		0.4527	0.4589	0.4620	0.4620				
10 P ₁	22.885.2	2134.2	2060.2	1988.2	1865.2				
11 P ₁ 2/1000	52.35.86	4554.81	4244.42	3952.94	3478.17				
12 P ₁ 2/1000	59253	160270	161281	162003	162003				
13 = F ₁ T ₂		6.5163	6.2988	6.3300	6.3300				
14 F ₁ Q _m		3.988	2.567	2.1824	1.9920				
15 L/H (F ₁ Q _m) ²		15.90	20.991	51.602	99.414				
16 F _w = L/H (F ₁ Q _m) ² (1-e ^s)		7.52	14.22	23.804	45.93				
17 P _w = P ₁ 2 + F _w		4562.0	4258.14	3996.95	3534.97				
18 P _w = e ^s P _w 2	4466.05	8234.76	7567.2	7392.44	6822.44				
19 P _s	3579.2	2837.0	2704.8	2718.1	2559.8				
20 P = (P ₁ + P _s)	2682.7	2510.6	2435.25	2353.6	2212.5				
21 P ₁ = (P/P _{cl})	3.939	3.733	3.617	3.509	3.320				
22 T ₁ = (T/T _{cl})	1.372	1.369	1.364	1.360	1.350				
23 Z (Table XI)	0.720	0.690	0.653	0.677	0.675				