

NEW MEXICO
XXXXXXXXXXXX CORPORATION COMMISSION-OIL & GAS CONSERVATION DIVISION
WORK SHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURES (P_c or P_w)

COMPANY Roger Hanks LEASE Preston WELL NO 1 DATE 1-23-71
L 7684 H 7684 L/H 1.000 ϕ .650 %CO₂ 0.63 %N₂ 0.82 %N₂S 0.28
d 1.995 f_i .017777 g_m 4995 P_r T_{cr}

LINE	1st	2nd	3rd	4th						
1. Q_m	1.008	.928	.718	.601						
2. T_w	534	534	534	534						
3. T_b	603	603	603	603						
4. T	569	569	569	569						
5. Z	.926	.921	.900	.888						
6. TZ	526.9	523.9	512.0	505.3						
7. gH/TZ	9.480	9.534	9.756	9.886						
8. a^2	1.427	1.430	1.442	1.449						
9. $1-a^2$	.299	.301	.306	.310						
10. P_c OR P_i	458.2	498.2	646.2	732.2						
11. P_c^2 OR P_i^2	209.9	248.2	417.6	536.1						
12. f_r	.017777	.017777	.017777	.017777						
13. $F_c = f_r TZ$	9.367	9.313	9.102	8.982						
14. $F_c Q_m$	9.442	8.643	6.535	5.398						
15. $L/H(F_c Q_m)^2$	89.14	74.70	42.71	29.14						
16. $F = L/H(F_c Q_m)^2 (1-a^2)$	26.65	22.48	13.07	9.034						
17. $P_w^2 = P_i^2 + F$	236.6	270.7	430.7	545.1						
18. P_i^2 OR $P_b^2 = P_c^2$ OR P_w^2	337.6	387.1	621.0	789.9						
19. P_i OR P_b	581.0	622.2	788.1	888.8						
20. P	519.6	560.2	717.1	810.4						
21. P_i	.78	.84	1.07	1.21						
22. T_r	1.52	1.52	1.52	1.57						
23. Z	.926	.921	.900	.888						