

Following is a copy of the work sheet for calculation of wellhead pressures (P_{wh} or P_w)

FROM KNOWN BOTTOM HOLE PRESSURE (P_{bh} or P_s)

Form C-122F
Adopted 9-1-65

COMPANY XO PRODUCTION LEASE SULLY ST. 10th WELL NO. 1 DATE 7-2-90

LOCATION: Unit _____ Section _____ Township _____ Range _____

L 11676 H 11676 L/H 11000 G 648 % CO₂ .07 % N₂ 1.04 % H₂S -

* = P_w

GH 2916.33 P_{gr} 666 T_{gr} 326

①

②

③

④

LINE	1	2	3	4	5	6	7	8
1	$T_w(W.H. \cdot R)$	534	534	534	534	534	534	534
2	$T_s(B.H. \cdot R)$	651	651	651	651	651	651	651
3	$T = \frac{T_w + T_s}{2}$	592.5	592.5	592.5	592.5	592.5	592.5	592.5
4	Z (Est.)	.836	.821	.834	.819	.829	.817	.822
5	TZ	495.3	486.4	494.1	483.6	491.1	484.0	483.4
6	GH/TZ	15.981	16.273	16.024	16.502	16.116	16.353	16.234
7	e^s (Table XIV)	1.820	1.840	1.833	1.843	1.830	1.846	1.835
8	P_{gr} or P_s	3167.2	3167.2	3116.2	3116.2	3004.2	3004.2	2813.2
9	P_{gr}^2 or P_s^2	10031.2	10031.2	9710.7	9710.7	9025.2	9025.2	7914.2
10	$P_c^2 = P_{gr}^2 / e^s$ or $P_w^2 = P_s^2 / e^s$	5508.9	5508.9	5508.9	5265.0	4931.4	4885.8	4382.9
11	P_{gr} or P_w	2347.1	2347.1	2347.1	2295.0	2220.6	2210.8	2074.1
12	$P_c = \frac{P_w + P_s}{2}$ or $\left(\frac{P_c + P_j}{2} \right)$	2757.1	2750.7	2711.9	2705.2	2612.4	2617.5	2443.6
13	$P_r = (P/P_{gr})$	4.13	4.12	4.07	4.07	3.92	3.92	3.66
14	$T_r = (T/T_{gr})$	1.57	1.57	1.57	1.57	1.57	1.57	1.57
15	Z (Table XI)	.821	.821	.819	.819	.817	.817	.816