

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (P_w or P_s)

Form C-122F
Adopted 9-1-65

FROM KNOWN BOTTOM HOLE PRESSURE (P_s)

COMPANY WAINOCO OIL & GAS LEASE WHITE RANCH WELL NO. # 2 DATE 12-13-79

LOCATION: Unit M Section 34 Township 11 Range 29

L 8355 H 8355 L/H 1.000 G .709 % CO₂ .742 % N₂ 1.761 % H₂S

GH 5924 P_{cr} 668 T_{cr} 395
TABLE IX & X TABLE IX & X

	1	2	3	4	5	6	7	8
1	T _w (W.H. °R)	534	534	534	534	534	534	534
2	T _s (B.H. °R)	618	618	618	618	618	618	618
3	T = ($\frac{T_w + T_s}{2}$)	576	576	576	576	576	576	576
4	Z (Est.)	.758	.747	.748	.745	.745	.748	.754
5	TZ	436.6	430.3	430.8	429.1	429.1	430.8	434.3
6	GH/TZ	13.568	13.768	13.750	13.805	13.805	13.750	13.640
7	e ^s (Table XIV)	1.663	1.676	1.675	1.678	1.678	1.675	1.668
8	P _f or P _s	2805.2	2805.2	2580.2	2580.2	2379.2	2200.2	2200.2
9	P _f ² or P _s ²	7869.1	7869.1	6657.4	6657.4	5660.6	4840.9	4840.9
10	P _c ² = P _f ² /e ^s or P _w ² = P _s ² /e ^s	4731.0	4695.7	3975.4	3967.1	3373.1	2886.7	2902.5
11	P _c or P _w	2175.1	2168.0	1993.8	1991.8	1836.6	1699.0	1703.7
12	P = ($\frac{P_w + P_s}{2}$) or ($\frac{P_c + P_f}{2}$)	2490.1	2486.1	2287.0	2286.0	2107.9	1949.6	1951.9
13	P _r = (P/P _{cr})	3.73	3.72	3.42	3.42	3.16	2.92	2.92
14	T _r = (T/T _{cr})	1.46	1.46	1.46	1.46	1.46	1.46	1.46
15	Z (Table XI)	.747	.747	.745	.745	.748	.748	.754