

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

FROM KNOWN BOTTOM HOLE PRESSURE (P_f or P_s)

COMPANY Jake L. Hamon LEASE Union State WELL NO. 2 DATE 10/24/79

LOCATION: Unit A Section 30 Township 20 Range 36
L 11344 H 11344 LH 1.000 G 603 % CO₂ 29 % N₂ 453 % H₂S

GH 6840 P_{GT} 671 T_{GT} 358
15th 2nd 3rd 4th

LINE	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)	647	647	647	647	647	647	647
3	$T = (\frac{T_w + T_s}{2})$	590.5	590.5	590.5	590.5	590.5	590.5	590.5
4	Z (Est.)	.836	.838	.835	.838	.839	.836	.839
5	TZ	493.7	494.8	493.1	494.8	493.1	493.7	495.4
6	GH/TZ	13.856	13.823	13.872	13.823	13.806	13.856	13.806
7	e^s (Table XIV)	1.681	1.679	1.682	1.679	1.678	1.681	1.678
8	P_f or P_s	2606.2	2606.2	2569.2	2569.2	2537.2	2485.2	2485.2
9	P_f^2 or P_s^2	6792.3	6792.3	6600.8	6600.8	6437.4	6176.2	6176.2
10	$P_c^2 = P_f^2 / e^s$ or $P_w^2 = P_s^2 / e^s$	4039.8	4044.8	3923.5	3930.8	3826.3	3673.4	3680.2
11	P_c or P_w	2009.9	2011.2	1980.8	1982.6	1956.1	1916.6	1918.4
12	$P_c \cdot (\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	2308.1	2308.7	2275.0	2275.9	2247.9	2200.9	2201.8
13	$P_f = (P / P_{cr})$	3.44	3.44	3.39	3.39	3.35	3.28	3.28
14	$T_f = (T / T_{cr})$	1.65	1.65	1.65	1.65	1.65	1.65	1.65
15	Z (Table XI)	.838	.838	.838	.838	.839	.839	.839