

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (P_{wf} or P_s)
FROM KNOWN BOTTOM HOLE PRESSURE (P_{bhp} or P_s)

COMPANY ZHO PROD. CO. LEASE BURTON ELYT FLD. WELL NO. 1 DATE 8-12-90
LOCATION: Unit A1 Section 11 Township 22S Range 25E
L 1466 H 1466 L/H 1.000 G .728 % CO₂ .46 % N₂ 1.15 % H₂S —
GH 5347.3 P_{cr} 467 T_{cr} 251

LINE		1	2	3	4	5	6	7	8
1	$T_w(W.H. \cdot R)$	534	534	534	534	534	534	534	534
2	$T_s(B.H. \cdot R)$	649	649	649	649	649	649	649	649
3	$T = \frac{T_w + T_s}{2}$	591.5	591.5	591.5	591.5	591.5	591.5	591.5	591.5
4	Z (Est.)	.814	.786	.805	.781	.800	.778	.804	.781
5	TZ	-151.4	464.9	476.1	461.9	473.2	460.1	475.5	461.4
6	GH/TZ	17.334	17.954	17.530	18.069	17.640	18.138	17.552	18.069
7	e^s (Table XIV)	1.915	1.960	1.929	1.969	1.937	1.974	1.931	1.969
8	P_{wf} or P_s	3396.2	3396.2	3260.2	3260.2	3172.2	3172.2	3297.2	3297.2
9	P_{wf}^2 or P_s^2	11534.2	11534.2	10628.9	10628.9	10062.9	10062.9	10544.3	10544.3
10	$P_{wf}^2 = P_{wf}^2/e^s$ or $P_s^2 = P_s^2/e^s$	6020.6	5882.7	5507.8	5397.7	5193.1	5096.9	5459.5	5354.7
11	P_{wf} or P_s	2453.6	2425.4	2346.8	2323.3	2278.8	2257.6	2336.5	2314.0
12	$P_{wf} = \frac{P_{wf} + P_s}{2}$ or $(\frac{P_{wf} + P_s}{2})$	2924.1	2910.8	2883.5	2941.7	2925.5	2914.9	2941.1	2928.0
13	$P_r = (P/P_{cr})$	4.38	4.36	4.20	4.19	4.08	4.07	4.11	4.17
14	$T_r = (T/T_{cr})$	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
15	Z (Table XI)	.786	.785	.781	.781	.778	.778	.781	.781