

**WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (P_c or P_w)
FROM KNOWN BOTTOM HOLE PRESSURE (P_f or P_s)**

COMPANY Oxy LEASE State "D" WELL NO. 6 DATE 6-17-88
 LOCATION: Unit F Section 32 Township 21S Range 36E
 L 3577 H 3577 L/H 1.000 G 0.701 % CO₂ 0.16 % N₂ 3.07 % H₂S 0

GH 2507 P_{cr} 661 T_{cr} 383
 Rate #1 Rate #2 Rate #3 Rate #4

LINE	1	2	3	4	5	6	7	8
1	$T_w(W.H. \cdot R)$	532	532	532	532	532	532	532
2	$T_g(B.H. \cdot R)$	562	562	562	562	562	562	562
3	$T = \frac{T_w + T_g}{2}$	547	547	547	547	547	547	547
4	Z (Est.)	.919	.923	.921	.924	.924	.928	.929
5	TZ	502.613	504.881	503.787	505.428	505.428	507.616	508.163
6	GH/TZ	4.9871	4.9655	4.9763	4.9601	4.9601	4.9388	4.9335
7	e^S (Table XIV)	1.206	1.205	1.205	1.204	1.204	1.203	1.203
8	P_f or P_s	446.2	446.2	439.2	439.2	413.2	413.2	391.2
9	P_f^2 or P_s^2	199.094	199.094	192.877	192.877	170.734	170.734	153.037
10	$P_c^2 - P_f^2/e^S$ or $P_w^2 - P_s^2/e^S$	165.086	165.223	160.080	160.213	141.806	141.923	127.213
11	P_c or P_w	406.3	406.5	400.1	400.3	376.6	376.7	356.7
12	$P \left(\frac{P_w + P_g}{2} \right)$ or $\left(\frac{P_c + P_f}{2} \right)$	426.2	426.3	419.6	419.7	394.9	395.0	373.9
13	$P_r = (P/P_{cr})$	0.64	0.64	0.63	0.63	0.60	0.60	0.57
14	$T_r = (T/T_{cr})$	1.43	1.43	1.43	1.43	1.43	1.43	1.43
15	Z (Table XI)	.923	.923	.924	.924	.928	.928	.932