

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (P_{wh} or P_w)
FROM KNOWN BOTTOM HOLE PRESSURE (P_b or P_s)

COMPANY Phillips Petroleum Co. LEASE Lucas West Property WELL NO. 5 DATE 6-13-89
 LOCATION: Unit T Section 19 Township 19.5 Range 22.2
 L 11660 H 11660 LH 1000 G 0.682 % CO₂ .13 % N₂ 2.05 % H₂S 0
 (M) GH 292.13 P_{CT} 666 T_{CT} 225 * * * * *
 ** - FLOWING AND CALCULATED TO SURFACE

LINE	1	2	3	4	5	6	7	8
1	T_w (W.H. • R)	534						
2	T_s (B.H. • R)	651						
3	$T = \frac{T_w + T_s}{2}$	592.5						
4	Z (Est.)	.823						
5	TZ	487.6						
6	GH/TZ	16.307						
7	e^s (Table XIV)	1.843						
8	P_b or P_s	2843.2						
9	P_b or P_s^2	8083.7						
10	$P_c^2 = P_f^2/e^s$ or $P_w^2 = P_b^2/e^s$	4355.5						
11	P_c or P_w	2094.1						
12	$P_c \cdot \left(\frac{P_w + P_s}{2} \right)$ or $\left(\frac{P_c + P_f}{2} \right)$	2468.6						
13	$P_f = (P/P_{CT})$	3.00						
14	$T_f = (T/T_{CT})$	1.56						
15	Z (Table XI)	.816						