

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

FROM KNOWN BOTTOM HOLE PRESSURE (P_b or P_s)

COMPANY Harper Oil Co. LEASE South Dallas WELL NO. 1 DATE 1-11-85

LOCATION: Unit F Section 2 Township 10 S Range 26 E
L 6121 H 6121 LH 1.00 G .598 % CO₂ .101 % N₂ 2.687 % H₂S

GH 36660 P_{CT} 6663 T_{CT} 349

		RATES								#3	#4
LINE		1	2	3	4	5	6	7	8		
1	$T_w(W.H. ^\circ R)$	534	534	534	534	534	534	534	534		
2	$T_s(B.H. ^\circ R)$	595	595	595	595	595	595	595	595		
3	$T = \frac{T_w + T_s}{2}$	564	564	564	564	564	564	564	564		
4	Z (Est.)	.960	.959	.956	.958	.951	.954	.943	.945		
5	TZ	541.9	541.3	539.7	540.8	536.8	538.5	532.3	533.5		
6	GH/TZ	6.75	6.701	6.78	6.77	6.82	6.80	6.88	6.86		
7	e^S (Table XIV)	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29		
8	P_f or P_s	358.2	358.2	368.2	368.2	409.2	409.2	491.2	491.2		
9	P_f^2 or P_s^2	128.3	128.3	135.6	135.6	167.4	167.4	241.3	241.3		
10	$P_c^2 = P_f^2/e^S$ or $P_w^2 = P_s^2/e^S$	99.6	99.6	105.1	105.2	129.7	129.8	186.4	186.5		
11	P_c or P_w	315.6	315.6	324.2	324.3	360.1	360.2	431.8	431.9		
12	$P = \frac{P_w + P_s}{2}$ or $(\frac{P_c + P_f}{2})$	336.9	336.9	346.2	346.3	384.6	384.7	461.5	461.6		
13	$P_r = (P/P_{CT})$	.51	.51	.52	.52	.58	.58	.70	.70		
14	$T_r = (T/T_{CT})$	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62		
15	Z (Table XI)	.959	.959	.958	.958	.954	.954	.945	.945		