

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (P_c or P_{wf})

FROM KNOWN BOTTOM HOLE PRESSURE (P_f or P_{wf})

COMPANY Tomlinson LEASE State 2112 11 WELL NO. 2 DATE 5-8-60

LOCATION: Unit 11 Section 11 Township 19S Range 24E

L 11251 H 11351 LM 1.00 G 1.707 %CO₂ 2.340 %N₂ 1.029 %H₂S

GH 2045 P_{cr} 668 T_{cr} 292
TABLE IX B X TABLE IX B X

LINE		1	2	3	4	5	6	7	8
1	$T_w(W.H. \cdot R)$	524	534						
2	$T_g(B.H. \cdot R)$	640	641						
3	$T = (\frac{T_w + T_g}{2})$	581	581						
4	Z (Est.)	902	855						
5	TZ	538.1	505.3						
6	GH/TZ	15.05	15.88						
7	e^s (Table XIV)	1.759	1.814						
8	P_f or P_s	4463.2	4463.2						
9	P_f^2 or P_s^2	19930.2	19920.2						
10	$P_c^2 = P_f^2 / e^s$ or $P_{wf}^2 = P_s^2 / e^s$	11337.2	10981.1						
11	P_c or P_{wf}	3365.6	3313.8						
12	$P_c (\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	3914.4	3888.5						
13	$P_r = (P/P_{cr})$	5.16	5.82						
14	$T_r = (T/T_{cr})$	1.51	1.51						