

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

Form C-122F
Adopted 9-1-65

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

COMPANY Morale, Inc. LEASE State St. 33 Com WELL NO. 3 DATE 10-24-84

LOCATION: Unit 0 Section 30 Township 16 S Range 36 E

L 11.923 H 11.923 L/H 1.00 G 1.702 %CO₂ 1.385 %N₂ 1.356 %H₂S _____

GH 8230 P_{ct} 667 T_{ct} 385
TABLE IX & X TABLE IX & X

Sheet - 14

LINE		1	2	3	4	5	6	7	8
1	$T_w (W.H. \text{ } ^\circ R)$	534	534						
2	$T_s (B.H. \text{ } ^\circ R)$	651	651						
3	$T = (\frac{T_w + T_s}{2})$	592	592						
4	Z (Est.)	.936	.882						
5	TZ	554.6	522.9						
6	GH/TZ	14.84	15.75						
7	e^s (Table XIV)	1.744	1.805						
8	P_f or P_{ct}	4814.2	4814.2						
9	P_f^2 or P_{ct}^2	23176.5	23176.5						
10	$P_c^2 = P_f^2 / es$ or $P_w^2 = P_s^2 / es$	13285.0	12840.0						
11	P_c or P_w	3644.9	3583.3						
12	$P_s = (\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	4229.5	4198.7						
13	$P_r = (P/P_{cr})$	6.34	6.29						
14	$T_r = (T/T_{cr})$	1.52	1.52						
15	Z (Table XI)	.882	.879						

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G.C.D.
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