

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

FROM KNOWN BOTTOM HOLE PRESSURE (P_f or P_g)

Form C-122F
Adopted 9-1-65

COMPANY W. H. G. Leasing LEASE 5114 A' COM WELL NO. 1 DATE 12-21-81

LOCATION: Unit 0 Section 16 Township 19S Range 29E

L H 10,489 L/H 1000 G .709 % CO₂ .33 % N₂ .792 % H₂S _____

GH 7578 P_{gr} 668 T_{gr} 355
TABLE IX & X TABLE IX & X

Subst - IN

| LINE | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|------|--|---------|---------------|---|---|---|---|---|---|
| 1 | T_w (W.H. °R) | 534 | 534 | | | | | | |
| 2 | T_g (B.H. °R) | 641 | 641 | | | | | | |
| 3 | $T = \frac{T_w + T_g}{2}$ | 588 | 588 | | | | | | |
| 4 | Z (Est.) | 1.066 | .999 | | | | | | |
| 5 | TZ | 621.3 | 586.9 | | | | | | |
| 6 | GH/TZ | 12.100 | 12.912 | | | | | | |
| 7 | $e^{S'} (Table XIV)$ | 1.574 | 1.623 | | | | | | |
| 8 | P_f or P_g | 6036.2 | 6036.2 | | | | | | |
| 9 | P_f^2 or P_g^2 | 36435.7 | 36435.7 | | | | | | |
| 10 | $P_c^2 = P_f^2 / e^S$ or $P_w^2 = P_g^2 / e^S$ | 23145.4 | 22451.6 | | | | | | |
| 11 | P_c or P_w | 4810.9 | <u>4738.3</u> | | | | | | |
| 12 | $P = \frac{P_w + P_s}{2}$ or $\frac{P_c + P_f}{2}$ | 5423.6 | 5387.3 | | | | | | |
| 13 | $P_f = (P/P_{cr})$ | 8.12 | 8.06 | | | | | | |
| 14 | $T_f = (T/T_{cr})$ | 1.49 | 1.49 | | | | | | |
| 15 | Z (Table XI) | .999 | .995 | | | | | | |