

# WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES ( $P_g$ or $P_w$ )

## FROM KNOWN BOTTOM HOLE PRESSURE ( $P_g$ or $P_w$ )

Form C-122F  
Adopted 9-1-65

COMPANY NO. 10000000 LEASE 2070000000 WELL NO. 4 DATE 10-2-65

LOCATION: Unit 17 Section 17 Township 20 S Range 29 E

L 20000 H 20000 L/H 10000 G 0.0000 % CO<sub>2</sub> 0.00 % N<sub>2</sub> 0.00 % H<sub>2</sub>S 0.00

GII 6270.00 P<sub>cr</sub> 6270 T<sub>cr</sub> 328  
TABLE IN 8.2

| LINE | 1                                                                                                                                                      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| 1    | $T_w(W.H.-R)$                                                                                                                                          | 534    | 534    | 534    | 534    | 534    | 534    | 534    |
| 2    | $T_g(B.H.-R)$                                                                                                                                          | 639    | 639    | 639    | 639    | 639    | 639    | 639    |
| 3    | $T = \frac{(T_w + T_g)}{2}$                                                                                                                            | 586.5  | 586.5  | 586.5  | 586.5  | 586.5  | 586.5  | 586.5  |
| 4    | Z (Est.)                                                                                                                                               | .802   | .814   | .806   | .820   | .814   | .827   | .832   |
| 5    | TZ                                                                                                                                                     | 2700.5 | 2777.4 | 472.7  | 480.9  | 2777.4 | 485.0  | 487.9  |
| 6    | GH/TZ                                                                                                                                                  | 20.833 | 20.619 | 14.764 | 14.512 | 14.619 | 14.389 | 14.302 |
| 7    | e <sup>s</sup> (Table XIV)                                                                                                                             | .7901  | .730   | 1.739  | 1.773  | 1.730  | 1.715  | 1.709  |
| 8    | P <sub>f</sub> or P <sub>g</sub>                                                                                                                       | 1770.0 | 1770.0 | 1880.2 | 1791.2 | 1791.2 | 1791.2 | 1791.2 |
| 9    | P <sub>f</sub> <sup>2</sup> or P <sub>g</sub> <sup>2</sup>                                                                                             | 3132.1 | 3132.1 | 3534.6 | 3201.8 | 3201.8 | 3201.8 | 3201.8 |
| 10   | P <sub>c</sub> <sup>2</sup> = P <sub>f</sub> <sup>2</sup> /e <sup>s</sup> or P <sub>w</sub> <sup>2</sup> = P <sub>g</sub> <sup>2</sup> /e <sup>s</sup> | 2235.1 | 2400.9 | 2032.1 | 2051.4 | 1752.3 | 1767.4 | 1797.0 |
| 11   | P <sub>c</sub> or P <sub>w</sub>                                                                                                                       | 47.3   | 49.0   | 45.2   | 45.4   | 41.8   | 42.1   | 42.3   |
| 12   | P <sub>c</sub> ( $\frac{P_w + P_g}{2}$ ) or ( $\frac{P_c + P_f}{2}$ )                                                                                  | 47.3   | 49.0   | 45.2   | 45.4   | 41.8   | 42.1   | 42.3   |
| 13   | P <sub>f</sub> = (P/P <sub>cr</sub> )                                                                                                                  | 0.6    | 0.6    | 2.47   | 2.47   | 2.24   | 2.24   | 2.24   |
| 14   | T <sub>f</sub> = (T/T <sub>cr</sub> )                                                                                                                  | 1.55   | 1.55   | 1.55   | 1.55   | 1.55   | 1.55   | 1.55   |
| 15   | Z (Table XI)                                                                                                                                           | .519   | .504   | .520   | .520   | .527   | .527   | .541   |