

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURE (Pc or Pw)  
FROM KNOWN BOTTOM HOLE PRESSURE (Pf or Ps)

FORM C-122F

COMPANY SANTA FE ENERGY  
UNIT L  
LEASE :PONTIAC #7WELL NO. : 1  
SECTION : 28 TOWNSHIP : 19  
H : 9374 L/H : 1  
CO2 : 0.81 N2 : 0.27  
GH : 5521.3 PCR : 675  
DATE 11/17/97  
RANGE : 29  
G/GMIX : 0.5890  
H2S :  
TCR : 351

| LINE |                         | 1       | 2       | 3       | 4       | 5       | 6       | 7      | 8      |
|------|-------------------------|---------|---------|---------|---------|---------|---------|--------|--------|
| 1    | TW(W.H. R)              | 534     | 534     | 534     | 534     | 534     | 534     | 534    | 534    |
| 2    | Ts(B.H. R)              | 627.7   | 627.7   | 627.7   | 627.7   | 627.7   | 627.7   | 627.7  | 627.7  |
| 3    | T=(Tw+Ts/2)             | 580.9   | 580.9   | 580.9   | 580.9   | 580.9   | 580.9   | 580.9  | 580.9  |
| 4    | Z (EST.)                | 0.894   | 0.827   | 0.829   | 0.826   | 0.826   | 0.826   | 0.826  | 0.829  |
| 5    | TZ                      | 519     | 481     | 482     | 480     | 480     | 480     | 480    | 481    |
| 6    | GH/TZ                   | 10.634  | 11.488  | 11.466  | 11.512  | 11.501  | 11.514  | 11.511 | 11.472 |
| 7    | eS(TABLE XIV)           | 1.490   | 1.539   | 1.537   | 1.540   | 1.539   | 1.540   | 1.540  | 1.538  |
| 8    | Pf or Ps                | 2894.73 | 2894.73 | 2728.17 | 2728.17 | 2558.52 | 2558.52 | 2263.3 | 2263.3 |
| 9    | Pf2 or Ps2              | 8379.5  | 8379.5  | 7442.9  | 7442.9  | 6546.0  | 6546.0  | 5122.5 | 5122.5 |
| 10   | Pc2=Pf/eS or Pw2=Ps2/eS | 5623.9  | 5446.5  | 4841.8  | 4833.5  | 4252.7  | 4250.7  | 3326.7 | 3331.6 |

|    |                        |       |       |       |       |       |       |       |       |
|----|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| 11 | Pc or Pw               | 2371  | 2334  | 2200  | 2199  | 2062  | 2062  | 1824  | 1825  |
| 12 | P=(Pw+Ps/2)or(Pc+Pf/2) | 2633  | 2614  | 2464  | 2463  | 2310  | 2310  | 2044  | 2044  |
| 13 | Pr=(P/Pcr)             | 3.90  | 3.87  | 3.65  | 3.65  | 3.42  | 3.42  | 3.03  | 3.03  |
| 14 | Tr(T/Tcr)              | 1.65  | 1.65  | 1.65  | 1.65  | 1.65  | 1.65  | 1.65  | 1.65  |
| 15 | Z (TABLE XI)           | 0.827 | 0.827 | 0.826 | 0.826 | 0.826 | 0.826 | 0.829 | 0.829 |

PW 1 : 2333.8 PW 2 : 2198.5 PW 3 : 2061.7 PW 4 : 1825.3