

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

FORM C-122F

COMPANY MURCHISON  
UNIT  
L 10877  
LEASE : OGDEN ST. WELL NO. : 3  
SECTION : 2 TOWNSHIP : 25  
H : 10877 L/H : 1  
CO2 : 1.47 N2 : 0.6  
GH : 7559.5 PCR : 672  
DATE : 4/7/97  
RANGE : 26  
G/GMIX : 0.6950  
H2S :  
TCR : 384

| 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)              | 642.8  | 642.8  | 642.8  | 642.8  | 642.8  | 642.8  | 642.8  | 642.8  |
| 3    | T=(Tw+Ts/2)             | 588.4  | 588.4  | 588.4  | 588.4  | 588.4  | 588.4  | 588.4  | 588.4  |
| 4    | Z (EST.)                | 0.827  | 0.773  | 0.771  | 0.776  | 0.771  | 0.778  | 0.774  | 0.784  |
| 5    | TZ                      | 487    | 455    | 453    | 456    | 454    | 458    | 455    | 461    |
| 6    | GH/TZ                   | 15.532 | 16.627 | 16.674 | 16.561 | 16.661 | 16.509 | 16.608 | 16.396 |
| 7    | eS(TABLE XIV)           | 1.790  | 1.865  | 1.869  | 1.861  | 1.868  | 1.857  | 1.864  | 1.849  |
| 8    | Pf or Ps                | 2412.9 | 2412.9 | 2295   | 2295   | 2211.5 | 2211.5 | 2068.6 | 2068.6 |
| 9    | Pf2 or Ps2              | 5822.1 | 5822.1 | 5267.0 | 5267.0 | 4890.7 | 4890.7 | 4279.1 | 4279.1 |
| 10   | Pc2=Pf/eS or Pw2=Ps2/eS | 3251.8 | 3121.0 | 2818.5 | 2830.4 | 2618.4 | 2633.4 | 2295.4 | 2313.8 |
| 11   | Pc or Pw                | 1803   | 1767   | 1679   | 1682   | 1618   | 1623   | 1515   | 1521   |
| 12   | P=(Pw+Ps/2)or(Pc+Pf/2)  | 2108   | 2090   | 1987   | 1989   | 1915   | 1917   | 1792   | 1795   |
| 13   | Pr=(P/Pcr)              | 3.14   | 3.11   | 2.96   | 2.96   | 2.85   | 2.85   | 2.67   | 2.67   |
| 14   | Tr(T/Tcr)               | 1.53   | 1.53   | 1.53   | 1.53   | 1.53   | 1.53   | 1.53   | 1.53   |
| 15   | Z (TABLE XI)            | 0.773  | 0.773  | 0.776  | 0.776  | 0.778  | 0.778  | 0.784  | 0.783  |

PW 1 : 1766.6 PW 2 : 1682.4 PW 3 : 1622.8 PW 4 : 1521.1