COMPANY : BTA  LEASE : VACA DRAW  WELL NO. : 1

UNIT :  SECTION : 10  TOWNSHIP : 25

L : 13801  H : 13801  L/H : 1  G/GMIX : 0.664

%CO2 : 0.173  %N2 : 0.643  H2S :  DATE : 7/15/99

d : 2.441  Fr : 0.010763  GH : 9163.9  RANGE : 33

Pc = 4303.2  Pc2 = 18517.5

Pt2 = *******  Pw = 4223.8

*******  4035.8

*******  3942.7

*******  3748.1

VOL 1 : 521  PSIA 1 : 4223.2  RESV.TEMP 212.0

VOL 2 : 1129  PSIA 2 : 4033.2

VOL 3 : 2131  PSIA 3 : 3933.2  SHUT-IN PR= 4303.2

VOL 4 : 4013  PSIA 4 : 3713.2

PCR : 673

TCR : 374

| | LINE | RATE 1 | | RATE 2 | | RATE 3 | | RATE 4 | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1ST | 2ND | 1ST | 2ND | 1ST | 2ND | 1ST | 2ND |
| 1 | QM | 0.521 | 0.521 | 1.129 | 1.129 | 2.131 | 2.131 | 4.013 | 4.013 |
| 2 | TM | 534 | 534 | 534 | 534 | 534 | 534 | 534 | 534 |
| 3 | Ts | 672.0 | 672.0 | 672.0 | 672.0 | 672.0 | 672.0 | 672.0 | 672.0 |
| 4 | T | 603.0 | 603.0 | 603.0 | 603.0 | 603.0 | 603.0 | 603.0 | 603.0 |
| | PR (est) | 6.28 | | 5.99 | | 5.84 | | 5.52 | |
| 5 | Z(est) | 0.888 | 0.950 | 0.875 | 0.933 | 0.868 | 0.924 | 0.854 | 0.906 |
| 6 | TZ | 535.5 | 572.7 | 527.5 | 562.4 | 523.5 | 557.2 | 515.2 | 546.4 |
| 7 | GH/TZ | 17.113 | 16.001 | 17.371 | 16.295 | 17.504 | 16.446 | 17.786 | 16.771 |
| 8 | eS | 1.900 | 1.822 | 1.918 | 1.842 | 1.928 | 1.853 | 1.948 | 1.876 |
| 9 | 1-e-S | 0.474 | 0.451 | 0.479 | 0.457 | 0.481 | 0.460 | 0.487 | 0.467 |
| 10 | Pt | 4223.2 | 4223.2 | 4033.2 | 4033.2 | 3933.2 | 3933.2 | 3713.2 | 3713.2 |
| 11 | Pt2 /1000 | 17835.4 | 17835.4 | 16266.7 | 16266.7 | 15470.1 | 15470.1 | 13787.9 | 13787.9 |
| 12 | Fr | 0.010763 | 0.010763 | 0.010763 | 0.010763 | 0.010763 | 0.010763 | 0.010763 | 0.0107631 |
| 13 | Fc=FrTZ | 5.764 | 6.164 | 5.678 | 6.053 | 5.635 | 5.997 | 5.546 | 5.881 |
| 14 | FcQm | 3.00 | 3.21 | 6.41 | 6.83 | 12.01 | 12.78 | 22.25 | 23.60 |
| 15 | L/H(FcQm) | 9.0 | 10.3 | 41.1 | 46.7 | 144.2 | 163.3 | 495.2 | 557.0 |
| 16 | Fw | 4.270584 | 4.653692 | 19.67128 | 21.35294 | 69.39694 | 75.18443 | 241.0558 | 260.03238 |
| 17 | Pw2 | 17839.7 | 17840.1 | 16286.4 | 16288.1 | 15539.5 | 15545.2 | 14028.9 | 14047.9 |
| 18 | Ps2 | 33891.6 | 32507.8 | 31241.1 | 30008.5 | 29957.2 | 28802.5 | 27332.9 | 26347.3 |
| 19 | Ps | 5821.6 | 5701.6 | 5589.4 | 5478.0 | 5473.3 | 5366.8 | 5228.1 | 5133.0 |
| 20 | P | 5022.4 | 4962.4 | 4811.3 | 4755.6 | 4703.3 | 4650.0 | 4470.6 | 4423.1 |
| 21 | Pr | 7.46 | 7.37 | 7.15 | 7.07 | 6.99 | 6.91 | 6.64 | 6.57 |
| 22 | Tr | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 |
| 23 | Z | 0.950 | 0.945 | 0.933 | 0.928 | 0.924 | 0.920 | 0.906 | 0.903 |

Pc2-Pw2= 677.5  Pw2 = 17840.1

2229.5  16288.1

2972.3  15545.2

4469.6  14047.9

n = 1.000

Pc2/(Pc2-Pw2) = 27.334

8.306

6.230

4.143

[Pc2/Pc2-Pw2]n = 27.334

8.306

6.230

4.143

AOF= Q 14.241

9.377

13.276

16.626

FORM C122-D