Submit in duplicate to appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Depa. nt

Form C-122
Revised 4-1-91

# OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

## MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Operator: CONOCO, INC. | | | | | | Lease or Unit Name: STATE J-2 | | |
| Type Test: [X] Initial [ ] Annual [ ] Special | | | | | | Test Date: 7-11-94 | Well No.: 15 | |
| Completion Date | | Total Depth | | Plug Back TD | | Elevation | Unit Ltr. - Sec. - TWP - Rge.: E - 2 21S 36E | |
| Csg. Size: 5½ | Wt.: 15.5 | d | Set At: 3750 | Perforations: From: 2951 | To: 3270 | | County: LEA | |
| Tbg. Size: 2 3/8 | Wt.: 4.7 | d: 1.995 | Set At: 3186 | Perforations: From: | To: | | Pool: EUMONT | |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple: SINGLE | | | | Packer Set At: NONE | | | Formation: QUEENS | |
| Producing Thru: tbg | Reservoir Temp. °F | Mean Annual Temp. °F: 60 | | Baro. Press - $P_a$: 13.2 | | | Connection: PIPELINE | |
| L: **3186 | H: 3186 | Gg: .679 | % $CO_2$: .03 | % $N_2$: 3.66 | % $H_2S$ | Prover | Meter Run | Taps |

| | FLOW DATA | | | | TUBING DATA | | CASING DATA | | |
|---|---|---|---|---|---|---|---|---|---|
| NO. | Prover Line Size X Orifice Size | Press. p.s.i.g. | Diff. $h_w$ | Temp. °F | Press. p.s.i.g. | Temp. °F | Press. p.s.i.g. | Temp. °F | Duration of Flow |
| SI | | | | | 140 | | | | 68 hr. |
| 1. | | | | | 70 | | | | 1 hr. |
| 2. | | | | | 48 | | | | " |
| 3. | | | | | 42 | | | | " |
| 4. | | | | | 40 | | | | " |
| 5. | | | | | | | | | |

### RATE OF FLOW CALCULATIONS

| NO. | COEFFICIENT (24 HOUR) | $\sqrt{h_w P_m}$ | Pressure $P_m$ | Flow Temp. Factor Ft. | Gravity Factor Fg. | Super Compress. Factor, F pv. | Rate of Flow Q, Mcfd |
|---|---|---|---|---|---|---|---|
| 1. | | | | | | | 50 |
| 2. | | VOLUMES MEASURED | | | | | 43 |
| 3. | | | | | | | 88 |
| 4. | | BY TOTAL FLOW METER | | | | | 145 |
| 5. | | | | | | | |

| NO. | $P_r$ | Temp. °R | $T_r$ | Z |
|---|---|---|---|---|
| 1. | | | | |
| 2. | | | | |
| 3. | | N/A | | |
| 4. | | | | |
| 5. | | | | |

Gas Liquid Hydrocarbon Ratio: Dry Gas Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Dry Deg.
Specific Gravity Separator Gas: .679 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: ***664 P.S.I.A. P.S.I.A.
Critical Temperature: ***373 R R

$P_c$ 161.9 $P_c^2$ 26.21

| NO. | $P_t^2$ | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|---|
| 1. | | 157.4 | 24.77 | 1.44 |
| 2. | | 156.7 | 24.55 | 1.66 |
| 3. | | 156.9 | 24.62 | 1.59 |
| 4. | | 156.5 | 24.49 | 1.72 |
| 5. | | | | |

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 15.42$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 15.42$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2,236$

Absolute Open Flow: 2,236 Mcfd @ 15.025 | Angle of Slope θ: 45° | Slope, n: 1.00000

Remarks: * CLACULATED FORM KNOWN BHPS ** BHP INSTR. SET @ THIS DEPTH
*** CORRECTED TO 3.66% $N^2$

| Approved By Division | Conducted By: | Calculated By: | Checked By: |
|---|---|---|---|
| | PRO WELL TESTER | KS | BM |