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

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-122
Revised October, 1999

# MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Operator LOUIS DREYFUS | | | | | | | | Lease or Unit Name STATE ETA | | | |
| Type Test [X] Initial [ ] Annual [ ] Special | | | | | | | | Test Date 3/15/00 | | Well No. 4 | |
| Completion Date 3/15/00 | | Total Depth 12762 | | Plug back TD 12556 | | | | Elevation 4044 GL | | Unit Ltr. - Sec. - TWP - Rge H 8 16-S 35-E | |
| Csg. Size 5 1/2 | Wt. 17# | d 4.892 | Set At 12674 | Perforations: From: 12285 To: 12295 | | | | | | County LEA | |
| Tbg. Size 2 3/8 | Wt. 4.7 | d 1.995 | Set At 12120 | Perforations: From: To: | | | | | | Pool | |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple single | | | | Packer Set At 12120 | | | | | | Formation MORROW | |
| Producing Thru Tbg. | Reservoir Temp. °F 195.2 | | | Mean Annual Temp. °F 60 | | Baro. Press - $P_a$ 13.2 | | | | Connection SALES | |
| L 12120 | hH 12120 | Gg .715 | | %$CO_2$ 6.440 | | %$N_2$ 1.512 | %$H_2S$ n/a | Prover n/a | | Meter Run 2.067 | Taps FLG |

| | 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 | | | | | 1640 | N/A | PKR | | |
| 1. | 2.067 X 1.500 | 360 | 7 | 73 | 1530 | | | | 60MINS. |
| 2. | 2.067 X 1.500 | 364 | 22 | 71 | 1440 | | | | 60MINS. |
| 3. | 2.067 X 1.500 | 381 | 45 | 62 | 1285 | | | | 60MINS. |
| 4. | 2.067 X 1.500 | 430 | 130 | 68 | 780 | | | | 60MINS. |
| 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. | | | | | | | 810 |
| 2. | GAS VOLUMES | MEASURED | BY TOTAL | FLOW | METER | | 1510 |
| 3. | | | | | | | 2068 |
| 4. | | | | | | | 3736 |
| 5. | | | | | | | |

| No. | $P_r$ | Temp. °R | $T_r$ | $Z$ |
|---|---|---|---|---|
| 1. | | | | |
| 2. | TOTAL FLOW | METER | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |

Gas Liquid Hydrocarbon Ratio 30,773 Mcf/bbl.
A. P. I. Gravity of Liquid Hydrocarbons 57.0 Deg.
Specific Gravity Separator Gas .7150 XXXXXXXXX
Specific Gravity Flowing Fluid N/A XXXXX
Critical Pressure 693 P.S.I.A. 690 P.S.I.A.
Critical Temperature 370 R. 409 R

$P_c$ 1653.2 $P_c^2$ 2733.1

| No. | $P_t^2$ | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|---|
| 1. | 2381.5 | 1550.3 | 2403.4 | 329.7 |
| 2. | 2111.8 | 1479.4 | 2188.8 | 544.3 |
| 3. | 1685.3 | 1353.9 | 1833.0 | 900.1 |
| 4. | 629.2 | 1073.7 | 1152.8 | 1580.2 |
| 5. | | | | |

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 1.730

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1.685

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 6,295

Absolute Open Flow 6,295 Mcfd @ 15.025 Angle of Slope θ: 46.39 Slope, n: .9523

Remarks: * WELL MADE 11 BBLS OF 57 API GRAVITY CONDENSATE DURING TEST.

| Approved By Division | Conducted By: PRO WELL TESTING | Calculated By: MB. | Checked By: BM. |
|---|---|---|---|
| | | | |