NEW MEXICO OIL CONSERVATION COMMSSIO

# MULTIPOINT AN ONE POINT BACK PRESSURE TEST R GAS WELL

Form C-122
Revised 9-1-65

| | | | | |
|---|---|---|---|---|
| Type Test: ☒ Initial ☐ Annual ☐ Special | | | Test Date: 3-6-75 | |
| Company: CONTINENTAL OIL Co | Connection: NONE | | | |
| Pool: UNDESIGNATED | Formation: MORROW | | Unit: BELL LAKE | |
| Completion Date: 3-6-75 | Total Depth: 13,589 | Plug Back TD: 13483 | Elevation: 3474 DF | Farm or Lease Name: BELL LAKE UNIT 4 |
| Csg. Size: 7 1/2 5" LINER | Wt.: 33.7 & 39 18# | d: | Set At: 11,900 11,782 to 13483 | Perforations: from 13,303 To 13,313 |
| Well No.: 15 | | | | |
| Tbg. Size: 2 7/8 | Wt.: 6.50 | d: 2.441 | Set At: 13180 | Perforations: From To |
| Unit: K | Sec.: 8 | Twp.: 23S | Rge.: 34E | |
| Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE | | Packer Set At: 13,180 | County: LEA | |
| Producing Thru: TUBING | Reservoir Temp. °F: 200° @ 13,308 | Mean Annual Temp. °F: | Baro. Press. – $P_a$: 15.025 | State: NEW MEXICO |

| L | H | Gg | % $CO_2$ | % $N_2$ | % $H_2S$ | Prover | Meter Run | Taps |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | 4" | Flg |

## FLOW DATA / TUBING DATA / CASING DATA

| NO. | Prover Line Size X Orifice Size | Press. p.s.i.g. | Diff. $h_w$ | Temp. °F | Tubing Press. p.s.i.g. | Tubing Temp. °F | Casing Press. p.s.i.g. | Casing Temp. °F | Duration of Flow |
|---|---|---|---|---|---|---|---|---|---|
| SI | | | | | 6072 | 73° | PKR | | 0 |
| 1. | 4.026 x 1.250 | 446 | 13.9 | 87° | 5680 | 73° | | | 1.750 |
| 2. | 4.026 x 1.250 | 452 | 33.0 | 102° | 5390 | 74° | | | 1.50 |
| 3. | 4.026 x 1.250 | 454 | 56.0 | 104° | 5100 | 74° | | | 1.50 |
| 4. | 4.026 x 1.250 | 454 | 89.6 | 105° | 4725 | 74° | | | 1.50 |
| 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, Fpv | Rate of Flow Q, Mcfd |
|---|---|---|---|---|---|---|---|
| 1 | 7.469 | 82.53 | 446 | .9750 | 1.266 | 1.035 | 760 |
| 2. | 7.469 | 123.45 | 452 | .9618 | 1.266 | 1.035 | 1,162 |
| 3. | 7.469 | 161.05 | 454 | .9602 | 1.266 | 1.035 | 1,513 |
| 4. | 7.469 | 204.67 | 454 | .9592 | 1.266 | 1.035 | 1,921 |
| 5. | | | | | | | |

| NO. | $P_r$ | Temp. °R | $T_r$ | Z |
|---|---|---|---|---|
| 1 | | | | |
| 2. | Computer Calc | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |

Gas Liquid Hydrocarbon Ratio 1305 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 47.2 Deg.
Specific Gravity Separator Gas .624 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure ____ P.S.I.A. ____ P.S.I.A.
Critical Temperature ____ R ____ R

$P_c$ 7647.5 $P_c^2$ 58,484

| NO | $P_t^2$ | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|---|
| 1 | * | 7216.0 | 52071 | 6413 |
| 2 | | 6900.3 | 47614 | 10870 |
| 3 | | 6575.1 | 43,232 | 15,252 |
| 4 | | 6152.1 | 37848 | 20,636 |
| 5 | | | | |

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = * 9.120$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 6.220$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4,708$ MCF

Absolute Open Flow 4,708 Mcfd @ 15.025 Angle of Slope θ ____ Slope, n .829

Remarks: ____

| Approved By Commission: | Conducted By: | Calculated By: | Checked By: |
|---|---|---|---|
| | W. E. Tucker | W. E. Tucker | V. OBOYA |