NEW MEXICO OIL CONSERVATION COMMISSION

# MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
DEC 1982
OIL CON. DIV.
DIST. 3

| | | | | | |
|---|---|---|---|---|---|
| Type Test: [X] Initial [ ] Annual [ ] Special | | | | Test Date: 12/02/82 | |
| Company: Northwest Pipeline Corporation | | Connection: New Completion | | Unit: Rosa | |
| Pool: Blanco | | Formation: Mesa Verde | | | |
| Completion Date: 11-19-82 | Total Depth: 5850' | Plug Back TD: 5803' | Elevation: 6388' | Farm or Lease Name: Rosa Unit Com | |
| Csg. Size: 7.000 / 4.500 | Wt.: 20.0 / 10.5 | d: 6.456 / 4.052 | Set At: 3800' / 3620'-5848' | Perforations: From 5441' To 5778' | Well No.: #90 |
| Tbg. Size: 2.375 | Wt.: 4.7 | d: 1.995 | Set At: 5659' | Perforations: From To | Unit: G Sec.: 33 Twp.: 32N Rge.: 6W |
| Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Gas - Single Completion | | | Packer Set At: None | | County: San Juan |
| Producing Thru: Tubing | Reservoir Temp. °F | Mean Annual Temp. °F | Baro. Press. – $P_a$ | | State: New Mexico |

| L | H | Gg | % $CO_2$ | % $N_2$ | % $H_2S$ | Prover: Positive Choke | Meter Run | Taps |
|---|---|---|---|---|---|---|---|---|
| . | | est. .580 | | | | | | |

## 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 | Shut-in Pressures | | | | | | 1146 | | 1159 | | |
| 1. | 2" | x | .750" | 298 | | 61° | 298 | | 696 | | 3 hrs. |
| 2. | | | | | | | | | | | |
| 3. | | | | | | | | | | | |
| 4. | | | | | | | | | | | |
| 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 | 9.604 | | 310 | .999 | 1.313 | 1.020 | 3983 |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |

| NO. | $P_t$ | Temp. °R | $T_r$ | Z |
|---|---|---|---|---|
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

$P_c$ 1171 $P_c^2$ 1371241

| NO | $P_t^2$ | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|---|
| 1 | | 708 | 501264 | 869977 |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.5762$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.4067$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 5603$

Absolute Open Flow 5603 Mcfd @ 15.025 Angle of Slope θ _____ Slope, n .75

Remarks: Produced light mist of water throughout test. Vented 546 MCF.

Approved By Commission: | Conducted By: | Calculated By: | Checked By: BAB