STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Revised 10-1-78

# MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

JAN 02 1985
OIL CON. DIV.
DIST. 3

| | | | | | |
|---|---|---|---|---|---|
| Type Test: [X] Initial [ ] Annual [ ] Special | | | | Test Date: 12-4-84 | |
| Company: Consolidated Oil & Gas | | | Connection: Northwest Pipeline | | Unit |
| Pool: Basin Dakota | | | Formation: Dakota | | |
| Completion Date: 11-1-84 | Total Depth: 8450 | | Plug Back TD: 8390 (CO) | Elevation: 7347 GR | Farm or Lease Name: Hoyt |
| Csg. Size: 5 1/2" / Wt.: 15.5# / d: 4.950 / Set At: 8437 | | | Perforations: From 8162 To 8370 | | Well No.: 2E |
| Tbg. Size: 1 1/2" / Wt.: 2.9# / d: 1.610 / Set At: 8360 | | | Perforations: From To | | Unit: I / Sec.: 5 / Twp.: 26 / Rge.: 4 |
| Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Multiple Gas | | | Packer Set At: 7760 | | County: Rio Arriba |
| Producing Thru: Tubing | Reservoir Temp. °F: @ | Mean Annual Temp. °F | Baro. Press. – $P_a$ | | State: New Mexico |
| L | H | Cg | % $CO_2$ | % $N_2$ | % $H_2S$ / Prover / Meter Run / Taps |

SI 11-13-84 FLOW DATA

| NO. | Prover Line Size X Orifice Size | Press. p.s.i.g. | Diff. $h_w$ | Temp. °F | TUBING DATA Press. p.s.i.g. | TUBING DATA Temp. °F | CASING DATA Press. p.s.i.g. | CASING DATA Temp. °F | Duration of Flow |
|---|---|---|---|---|---|---|---|---|---|
| SI | 20 days | | | | 1127 DWT | | Pkr. | | |
| 1. | 3/4" x 2" x 6" pos. choke | | | | 136 | | Pkr. | | 3 hour |
| 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 | 11.0 | | 148 | 1.000 | 1.240 | 1.013 | 2045 |
| 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

$P_c$ 1139 $P_c^2$ 1297321

| NO | $P_t$ | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|---|
| 1 | | 625.5 | 391289 | 906032 |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.4319$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.3089$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2677$

Absolute Open Flow 2677 Mcfd @ 15.025 Angle of Slope θ 53.13° Slope, n 0.75

Remarks:

Approved By Division: Conducted By: Calculated By: Neil Teftellon Checked By: