

# NEW MEXICO OIL CONSERVATION COMMISSION

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

Form C-122

UNIT : BDCDGU  
LEASE :  
WELL : 2133131F  
S/T/R : 13,21,33  
COUNTY: HARDING  
STATE : NEW MEXICO

TYPE TEST: 4 POINT  
: INITIAL  
TEST DATE: 11/ 4/93

COMPANY: AMOCO PRODUCTION COMPANY  
FIELD: BRAVO DOME POOL: N/A  
COMPLETED 08-23-93 TD = 2421.  
CSG SIZE = 4.5000 WT = 4.56  
TBG SIZE = 0.0000 WT = 0.00  
TYPE COMPLETION: SINGLE  
PRODUCING THROUGH: CASING

CONNECTION: BRAVO DOME PLANT  
RESERVOIR: TUBB  
PBD = 2406. ELEV = 4761.  
SET AT 2421. PERF: 2340.- 2359.  
SET AT 0. PERF: 0.- 0.  
PACKER SET AT: 0.

RESERVOIR TEMP., F = 95. @ 2421. FT. BARO. PRESS = 12.20 PSIA  
MEAN GROUND TEMP., F = 50.

| L     | H     | G     | % CO2  | % N2 | % H2S | PROVER | M-RUN | TAPS   |
|-------|-------|-------|--------|------|-------|--------|-------|--------|
| 2421. | 2421. | 1.527 | 100.00 | 0.00 | 0.00  | 0.0    | 4.0   | FLANGE |

| NO. | LINE SIZE | ORI. SIZE | FLOW PSIG | HW IN. | FLOW TEMP | TBG. PSIG | TBG. TEMP | CSG. PSIG | CSG. TEMP | FLOW HRS. |
|-----|-----------|-----------|-----------|--------|-----------|-----------|-----------|-----------|-----------|-----------|
| SI  |           |           |           |        |           |           |           |           |           |           |
| 1   | 3.96 X    | 2.750     | 182.      | 10.0   | 63.       | 0.        | 0.        | 270.      | 50.       | 24.0      |
| 2   | 3.96 X    | 2.750     | 150.      | 16.0   | 63.       | 0.        | 0.        | 182.      | 63.       | 1.0       |
| 3   | 3.96 X    | 2.750     | 112.      | 23.0   | 63.       | 0.        | 0.        | 150.      | 63.       | 1.0       |
| 4   | 3.96 X    | 2.750     | 90.       | 34.0   | 63.       | 0.        | 0.        | 120.      | 63.       | 1.0       |
|     |           |           |           |        |           |           |           | 91.       | 63.       | 1.0       |

| NO. | COEFFICIENT (24 - HOUR) | SQRT. (HWPM) | PRESS. PM | T-FACTR F(T) | G-FACTR F(G) | SC-FACTR F(PV) | FLOW MCFD |
|-----|-------------------------|--------------|-----------|--------------|--------------|----------------|-----------|
| 1   | 41.44                   | 44.07        | 194.2     | 0.9971       | 0.8092       | 1.0577         | 1558.     |
| 2   | 41.44                   | 50.94        | 162.2     | 0.9971       | 0.8092       | 1.0475         | 1784.     |
| 3   | 41.44                   | 53.45        | 124.2     | 0.9971       | 0.8092       | 1.0357         | 1851.     |
| 4   | 41.44                   | 58.95        | 102.2     | 0.9971       | 0.8092       | 1.0291         | 2028.     |

| NO. | P(R) | TEMP. R | T(R) | Z     | GAS LIQ RATIO, MCF/BBL | API G OF HYDROCARBONS | SP G SEPARATOR GAS | SP G FLOWING FLUID | CRITICAL PRES., PSIA | CRITICAL TEMP., R |
|-----|------|---------|------|-------|------------------------|-----------------------|--------------------|--------------------|----------------------|-------------------|
| 1   | 0.31 | 523.    | 0.81 | 0.894 | 0.000                  | 0.0                   | 1.527              | XXXXX              | 626.                 | 648.              |
| 2   | 0.26 | 523.    | 0.81 | 0.911 |                        |                       |                    |                    |                      |                   |
| 3   | 0.20 | 523.    | 0.81 | 0.932 |                        |                       |                    |                    |                      |                   |
| 4   | 0.16 | 523.    | 0.81 | 0.944 |                        |                       |                    |                    |                      |                   |

| NO. | PT*PT | PW   | PW*PW | PC*PC - PW*PW | PC = | PC*PC = | PC*PC/(PC*PC-PW*PW) = | (PC*PC/(PC*PC-PW*PW))*N = | AOE (MCF/DAY) = |
|-----|-------|------|-------|---------------|------|---------|-----------------------|---------------------------|-----------------|
| 1   | 38.   | 194. | 38.   | 42.           |      |         |                       |                           |                 |
| 2   | 26.   | 162. | 26.   | 54.           |      |         |                       |                           |                 |
| 3   | 17.   | 132. | 17.   | 62.           |      |         |                       |                           |                 |
| 4   | 11.   | 103. | 11.   | 69.           |      |         |                       |                           |                 |
|     |       |      |       |               |      |         |                       |                           | 282.5           |
|     |       |      |       |               |      |         |                       |                           | 80.             |
|     |       |      |       |               |      |         |                       |                           | 1.1537          |
|     |       |      |       |               |      |         |                       |                           | 1.0790          |
|     |       |      |       |               |      |         |                       |                           | 2189.           |

CALC WH OPEN FLOW = 2189. MCFD @ 15.025; SLOPE ANGLE = 62.0; N = 0.532

REMARKS:

AVERAGE HOURS PRODUCED/DAY: 24.00

APPROVED BY  
COMMISSION:

CONDUCTED BY:

CALCULATED BY:

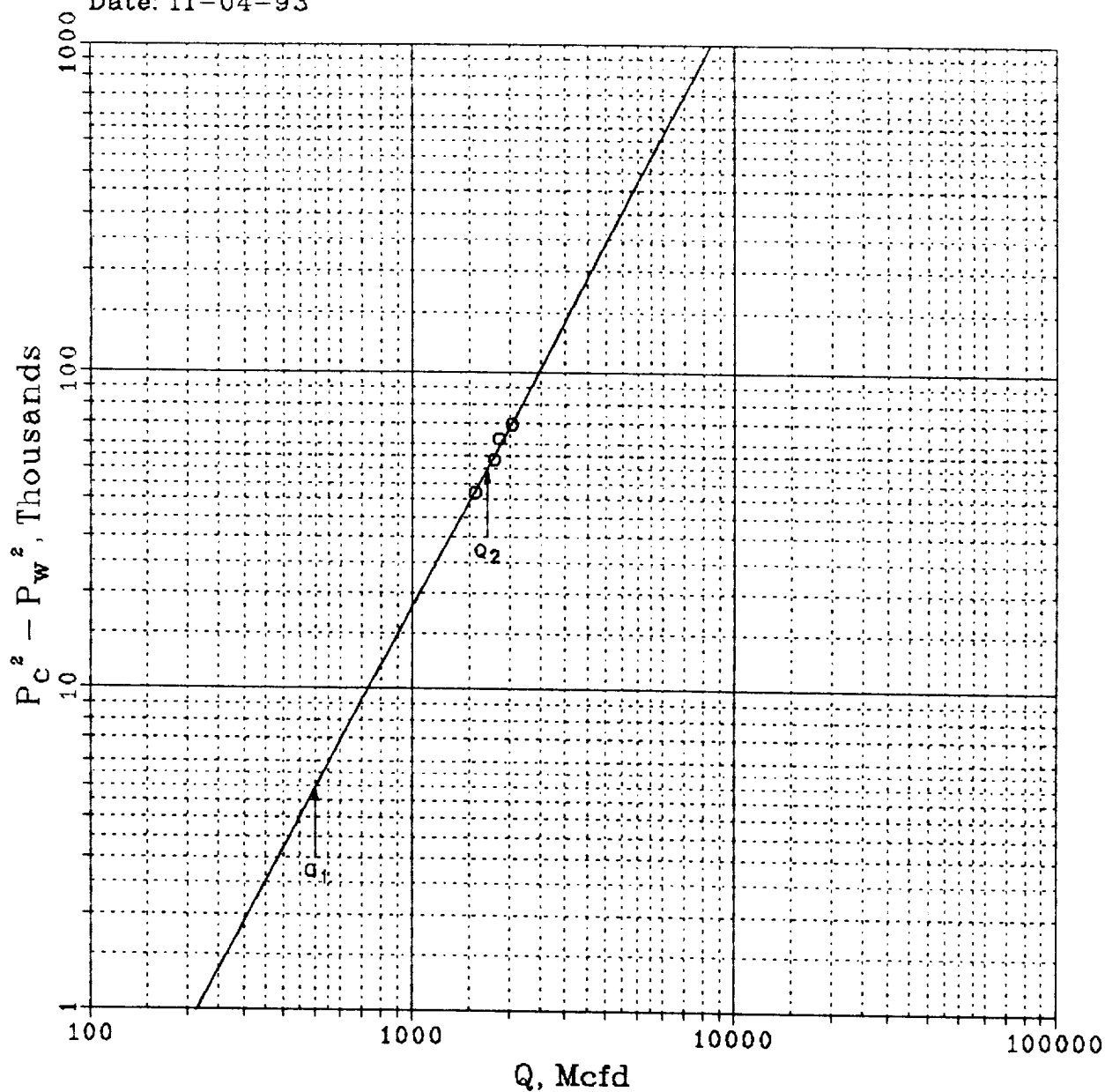
CHECKED BY:

*Billy E. Bruchman*

*L. J. Ford*

# GAS WELL BACK PRESSURE TEST

Company: Amoco Production Company  
Well: 2133131F  
Field/Pool: Bravo Dome  
County: Harding  
Date: 11-04-93



$$\begin{aligned}
 Q_1 &= 501. \text{ Mcfd}; & \text{LOG } Q_1 &= 2.70022 \\
 Q_2 &= 1707. \text{ Mcfd}; & \text{LOG } Q_2 &= 3.23215 \\
 n &= 0.53193 = 0.532
 \end{aligned}$$