

**NEW MEXICO OIL CONSERVATION COMMISSION**  
**MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL**

Form C-122

UNIT : BDCDGU  
 LEASE :  
 WELL : 2132251G  
 S/T/R : 25,21,32  
 COUNTY: HARDING  
 STATE : NEW MEXICO

TYPE TEST: 4 POINT  
 : INITIAL  
 TEST DATE: 12/11/93

COMPANY: AMOCO PRODUCTION COMPANY  
 FIELD: BRAVO DOME POOL: N/A  
 COMPLETED 09-17-93 TD = 2500.  
 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 = 2484. ELEV = 4922.  
 SET AT 2500. PERF: 2268.- 2458.  
 SET AT 0. PERF: 0.- 0.  
 PACKER SET AT: 0.

RESERVOIR TEMP., F = 95. @ 2500. FT. BARO. PRESS = 12.20 PSIA  
 MEAN GROUND TEMP., F = 50.

| L     | H     | G     | % CO2  | % N2 | % H2S | PROVER | M-RUN | TAPS   |
|-------|-------|-------|--------|------|-------|--------|-------|--------|
| 2500. | 2500. | 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   | 3.98 X    | 3.500     | 180.      | 13.0   | 61.       | 0.        | 0.        | 239.      | 50.       | 24.0      |
| 2   | 3.98 X    | 3.500     | 148.      | 21.0   | 60.       | 0.        | 0.        | 181.      | 61.       | 1.0       |
| 3   | 3.98 X    | 3.500     | 115.      | 34.0   | 59.       | 0.        | 0.        | 150.      | 60.       | 1.0       |
| 4   | 3.98 X    | 3.500     | 86.       | 47.0   | 57.       | 0.        | 0.        | 118.      | 59.       | 1.0       |
|     |           |           |           |        |           |           |           | 91.       | 57.       | 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   | 90.26                   | 49.99        | 192.2     | 0.9990       | 0.8092       | 1.0570         | 3855.     |
| 2   | 90.26                   | 58.00        | 160.2     | 1.0000       | 0.8092       | 1.0468         | 4435.     |
| 3   | 90.26                   | 65.76        | 127.2     | 1.0010       | 0.8092       | 1.0367         | 4984.     |
| 4   | 90.26                   | 67.94        | 98.2      | 1.0029       | 0.8092       | 1.0279         | 5115.     |

| NO. | P(R) | TEMP. R | T(R) | Z     | GAS LIQ RATIO, MCF/BBL | 0.000 |
|-----|------|---------|------|-------|------------------------|-------|
| 1   | 0.31 | 521.    | 0.80 | 0.895 | API G OF HYDROCARBONS  | 0.0   |
| 2   | 0.26 | 520.    | 0.80 | 0.912 | SP G SEPARATOR GAS     | 1.527 |
| 3   | 0.20 | 519.    | 0.80 | 0.931 | SP G FLOWING FLUID     | XXXXX |
| 4   | 0.16 | 517.    | 0.80 | 0.946 | CRITICAL PRES., PSIA   | 626.  |
|     |      |         |      |       | CRITICAL TEMP., R      | 648.  |

| NO. | PT*PT | PW   | PW*PW | PC*PC - PW*PW | PC =                      | 251.4  |
|-----|-------|------|-------|---------------|---------------------------|--------|
| 1   | 37.   | 193. | 37.   | 26.           | PC*PC =                   | 63.    |
| 2   | 26.   | 162. | 26.   | 37.           | PC*PC/(PC*PC-PW*PW) =     | 1.2025 |
| 3   | 17.   | 130. | 17.   | 46.           | (PC*PC/(PC*PC-PW*PW))*N = | 1.0966 |
| 4   | 11.   | 103. | 11.   | 53.           | AOE (MCF/DAY) =           | 5610.  |

CALC WH OPEN FLOW = 5610. MCFD @ 15.025; SLOPE ANGLE = 63.4; N = 0.500

REMARKS:

AVERAGE HOURS PRODUCED/DAY: 24.00

APPROVED BY  
 COMMISSION:

CONDUCTED BY:

*Billy E. Pruden*

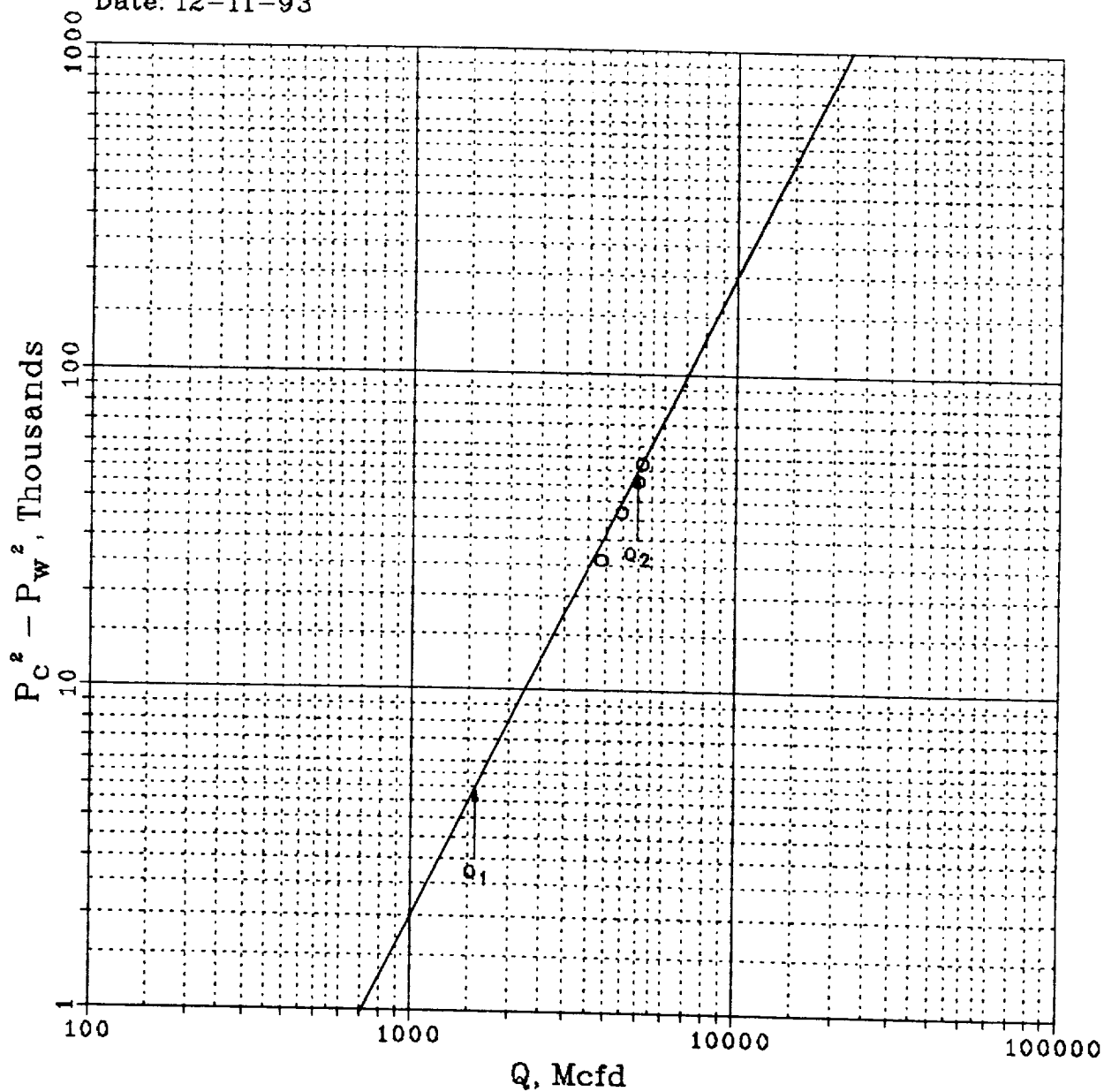
CALCULATED BY:

CHECKED BY:

*B. J. Ford*

# GAS WELL BACK PRESSURE TEST

Company: Amoco Production Company  
 Well: 2132251G  
 Field/Pool: Bravo Dome  
 County: Harding  
 Date: 12-11-93



$$\begin{aligned}
 Q_1 &= 1577. \text{ Mcfd}; & \text{LOG } Q_1 &= 3.19797 \\
 Q_2 &= 4989. \text{ Mcfd}; & \text{LOG } Q_2 &= 3.69798 \\
 n &= 0.50002 = 0.500
 \end{aligned}$$