

# NEW MEXICO OIL CONSERVATION COMMISSION

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

Form C-122

UNIT : BDCDGU  
LEASE :  
WELL : 2133061G  
S/T/R : 06,21,33  
COUNTY: HARDING  
STATE : NEW MEXICO

TYPE TEST: 4 POINT  
: INITIAL  
TEST DATE: 12/10/93

COMPANY: AMOCO PRODUCTION COMPANY  
FIELD: BRAVO DOME POOL: N/A  
COMPLETED 09-20-93 TD = 2625.  
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 = 2624. ELEV = 4993.  
SET AT 2625. PERF: 2354.- 2465.  
SET AT 0. PERF: 0.- 0.  
PACKER SET AT: 0.

RESERVOIR TEMP., F = 95. @ 2625. FT. BARO. PRESS = 12.20 PSIA  
MEAN GROUND TEMP., F = 50.

| L     | H     | G     | % CO2  | % N2 | % H2S | PROVER | M-RUN | TAPS   |
|-------|-------|-------|--------|------|-------|--------|-------|--------|
| 2625. | 2625. | 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    | 2.750     | 180.      | 18.0   | 62.       | 0.        | 0.        | 240.      | 50.       | 24.0      |
| 2   | 3.98 X    | 2.750     | 151.      | 28.0   | 62.       | 0.        | 0.        | 181.      | 62.       | 1.0       |
| 3   | 3.98 X    | 2.750     | 118.      | 47.0   | 63.       | 0.        | 0.        | 152.      | 62.       | 1.0       |
| 4   | 3.98 X    | 2.750     | 87.       | 74.0   | 62.       | 0.        | 0.        | 120.      | 63.       | 1.0       |
|     |           |           |           |        |           |           |           | 90.       | 62.       | 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   | 41.36                   | 58.82        | 192.2     | 0.9981       | 0.8092       | 1.0570         | 2077.     |
| 2   | 41.36                   | 67.60        | 163.2     | 0.9981       | 0.8092       | 1.0478         | 2366.     |
| 3   | 41.36                   | 78.23        | 130.2     | 0.9971       | 0.8092       | 1.0376         | 2709.     |
| 4   | 41.36                   | 85.68        | 99.2      | 0.9981       | 0.8092       | 1.0282         | 2943.     |

| NO. | P(R) | TEMP. R | T(R) | Z     |                        |             |
|-----|------|---------|------|-------|------------------------|-------------|
| 1   | 0.31 | 522.    | 0.81 | 0.895 | GAS LIQ RATIO, MCF/BBL | 0.000       |
| 2   | 0.26 | 522.    | 0.81 | 0.911 | API G OF HYDROCARBONS  | 0.0         |
| 3   | 0.21 | 523.    | 0.81 | 0.929 | SP G SEPARATOR GAS     | 1.527 XXXXX |
| 4   | 0.16 | 522.    | 0.81 | 0.946 | SP G FLOWING FLUID     | XXXXX 1.527 |
|     |      |         |      |       | CRITICAL PRES., PSIA   | 626. 626.   |
|     |      |         |      |       | CRITICAL TEMP., R      | 648. 648.   |

| NO. | PT*PT | PW   | PW*PW | PC*PC - PW*PW |                           |        |
|-----|-------|------|-------|---------------|---------------------------|--------|
| 1   | 37.   | 193. | 37.   | 26.           | PC =                      | 252.5  |
| 2   | 27.   | 164. | 27.   | 37.           | PC*PC =                   | 64.    |
| 3   | 17.   | 132. | 17.   | 46.           | PC*PC/(PC*PC-PW*PW) =     | 1.1956 |
| 4   | 10.   | 102. | 10.   | 53.           | (PC*PC/(PC*PC-PW*PW))*N = | 1.0934 |
|     |       |      |       |               | AO F (MCF/DAY) =          | 3218.  |

CALC WH OPEN FLOW = 3218. MCFD @ 15.025; SLOPE ANGLE = 63.4; N = 0.500

REMARKS:

AVERAGE HOURS PRODUCED/DAY: 24.00

APPROVED BY  
COMMISSION:

CONDUCTED BY:

*Billy E. Kruhan*

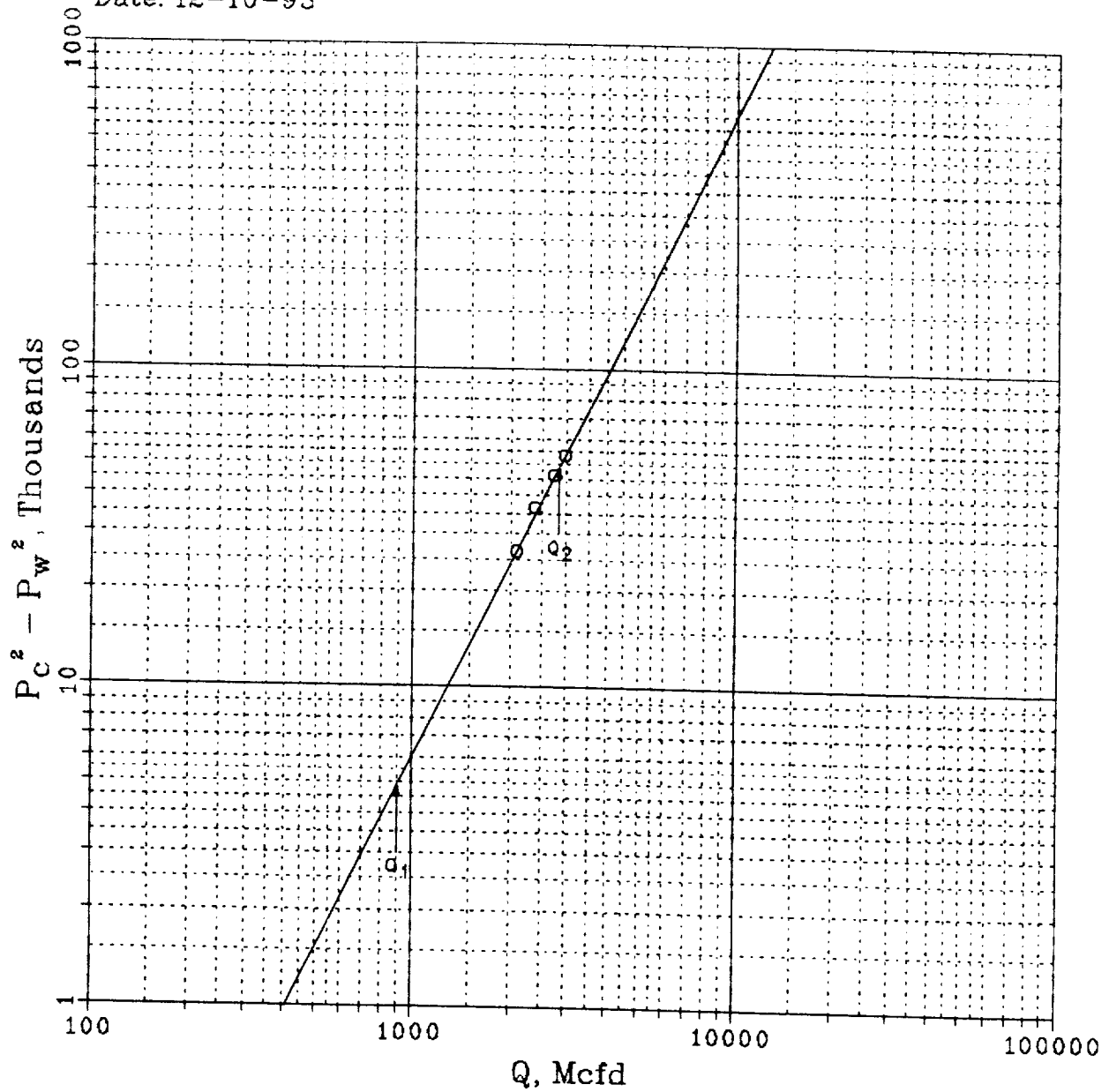
CALCULATED BY:

CHECKED BY:

*W J Ford*

# GAS WELL BACK PRESSURE TEST

Company: Amoco Production Company  
Well: 2133061G  
Field/Pool: Bravo Dome  
County: Harding  
Date: 12-10-93



$$\begin{aligned} Q_1 &= 901. \text{ Mcfd}; & \text{LOG } Q_1 &= 2.95481 \\ Q_2 &= 2850. \text{ Mcfd}; & \text{LOG } Q_2 &= 3.45482 \\ n &= 0.50002 = 0.500 \end{aligned}$$