

# NEW MEXICO OIL CONSERVATION COMMISSION

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

Form C-122

UNIT : BDCDGU  
LEASE :  
WELL : 2133261J  
S/T/R : 26, 21, 33  
COUNTY: HARDING  
STATE : NEW MEXICO

TYPE TEST: 4 POINT  
: INITIAL  
TEST DATE: 11/23/93

COMPANY: AMOCO PRODUCTION COMPANY  
FIELD: BRAVO DOME POOL: N/A  
COMPLETED 09-13-93 TD = 2710.  
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: TUBH  
PBD = 2647. ELEV = 5032.  
SET AT 2710. PERF: 2438.- 2533.  
SET AT 0. PERF: 0.- 0.  
PACKER SET AT: 0.

RESERVOIR TEMP., F = 95. @ 2710. FT.

BARO. PRESS = 12.20 PSIA  
MEAN GROUND TEMP., F = 50.

| L     | H     | G     | % CO2  | % N2 | % H2S | PROVER | M-RUN | TAPS   |
|-------|-------|-------|--------|------|-------|--------|-------|--------|
| 2710. | 2710. | 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     | 175.      | 21.0   | 60.       | 0.        | 0.        | 241.      | 50.       | 24.0      |
| 2   | 3.98 X    | 3.500     | 144.      | 33.0   | 59.       | 0.        | 0.        | 179.      | 60.       | 1.0       |
| 3   | 3.98 X    | 3.500     | 111.      | 56.0   | 56.       | 0.        | 0.        | 150.      | 59.       | 1.0       |
| 4   | 3.98 X    | 3.500     | 84.       | 84.0   | 53.       | 0.        | 0.        | 119.      | 56.       | 1.0       |
|     |           |           |           |        |           |           |           | 96.       | 53.       | 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   | 90.59                   | 62.70        | 187.2     | 1.0000       | 0.8092       | 1.0554         | 4851.     |
| 2   | 90.59                   | 71.80        | 156.2     | 1.0010       | 0.8092       | 1.0456         | 5508.     |
| 3   | 90.59                   | 83.06        | 123.2     | 1.0039       | 0.8092       | 1.0354         | 6329.     |
| 4   | 90.59                   | 89.89        | 96.2      | 1.0068       | 0.8092       | 1.0274         | 6816.     |

| NO. | P(R) | TEMP. R | T(R) | Z     | GAS LIQ RATIO, MCF/BBL | 0.000       |
|-----|------|---------|------|-------|------------------------|-------------|
| 1   | 0.30 | 520.    | 0.80 | 0.898 | API G OF HYDROCARBONS  | 0.0         |
| 2   | 0.25 | 519.    | 0.80 | 0.915 | SP G SEPARATOR GAS     | 1.527 XXXXX |
| 3   | 0.20 | 516.    | 0.80 | 0.933 | SP G FLOWING FLUID     | XXXXX 1.527 |
| 4   | 0.15 | 513.    | 0.79 | 0.947 | CRITICAL PRES., PSIA   | 626. 626.   |
|     |      |         |      |       | CRITICAL TEMP., R      | 648. 648.   |

| NO. | PT*PT | PW   | PW*PW | PC*PC - PW*PW | PC =                      | 253.5  |
|-----|-------|------|-------|---------------|---------------------------|--------|
| 1   | 37.   | 191. | 37.   | 28.           | PC*PC =                   | 64.    |
| 2   | 26.   | 162. | 26.   | 38.           | PC*PC/(PC*PC-PW*PW) =     | 1.2231 |
| 3   | 17.   | 131. | 17.   | 47.           | (PC*PC/(PC*PC-PW*PW))*N = | 1.1137 |
| 4   | 12.   | 108. | 12.   | 53.           | AOE (MCF/DAY) =           | 7591.  |

CALC WH OPEN FLOW = 7591. MCFD @ 15.025; SLOPE ANGLE = 61.9; N = 0.535

REMARKS:

AVERAGE HOURS PRODUCED/DAY: 24.00

APPROVED BY  
COMMISSION:

CONDUCTED BY:

*Billy E. Furlow*

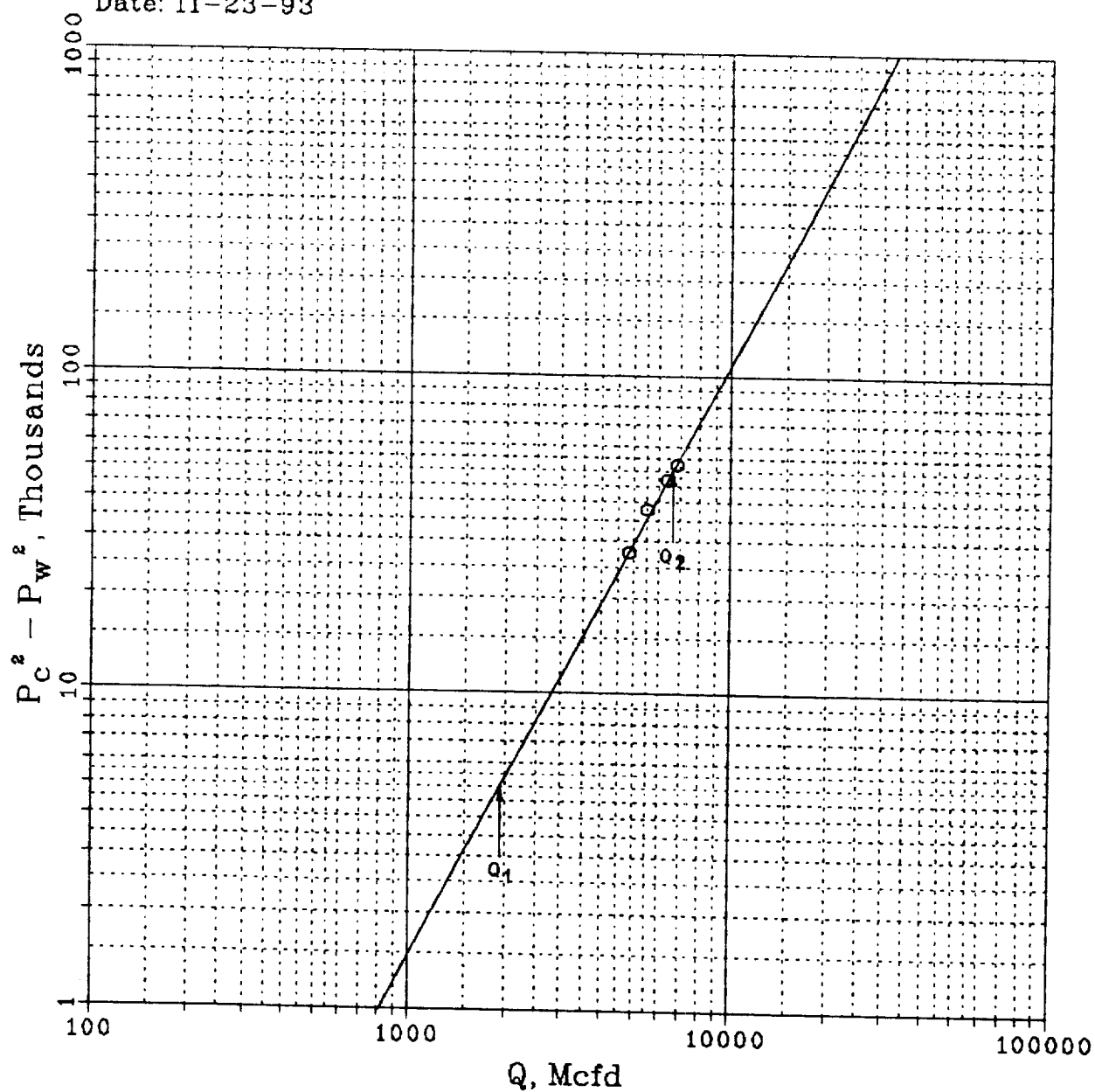
CALCULATED BY:

CHECKED BY:

*D. J. Ford*

# GAS WELL BACK PRESSURE TEST

Company: Amoco Production Company  
Well: 2133261J  
Field/Pool: Bravo Dome  
County: Harding  
Date: 11-23-93



$$\begin{aligned} Q_1 &= 1938 \text{ Mcfd; } \text{LOG } Q_1 = 3.28727 \\ Q_2 &= 6638 \text{ Mcfd; } \text{LOG } Q_2 = 3.82205 \\ n &= 0.53478 = 0.535 \end{aligned}$$