

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Antero-Pictured Cliffs Formation Pictured Cliffs County San Juan  
Initial I Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 10-30-58  
Company PAN AMERICAN PETROLEUM CORP. Lease Nadon Gas Unit "B" Well No. 1  
Unit 0 Sec. 27 Twp. 29N Rge. 10W Purchaser El Paso Natural Gas Company  
Casing 5 1/2 Wt. 14 I.D. 5.012 Set at 1899 Perf. 1899 To 1875  
Tubing 1.44 Wt. 2.3 I.D. 1 1/4 Set at 1895 Perf. 1895 To 1825  
Gas Pay: From 1899 To 1875 L 1852 xG 0.69 (est) GL 1270 Bar. Press. 12  
Producing Thru: Casing I Tubing \_\_\_\_\_ Type Well Gas - Single  
Single-Bradenhead-G. G. or G.O. Dual  
Date of Completion: 10-23-58 Packer None Reservoir Temp. 89° F

## OBSERVED DATA

Tested Through (1899) (Choke) (1895) Type Taps \_\_\_\_\_

| No. | Flow Data       |              |             | Tubing Data          |           | Casing Data |           | Duration of Flow Hr. |
|-----|-----------------|--------------|-------------|----------------------|-----------|-------------|-----------|----------------------|
|     | (Line) Size     | (Choke) Size | Press. psig | Diff. h <sub>w</sub> | Temp. °F. | Press. psig | Temp. °F. |                      |
| SI  | Start in 7 days |              |             |                      |           |             |           |                      |
| 1.  | 2"              | 1/4"         | 303         |                      | 68 (est)  | 310         | 68 (est)  | 1                    |
| 2.  |                 |              |             |                      |           |             |           |                      |
| 3.  |                 |              |             |                      |           |             |           |                      |
| 4.  |                 |              |             |                      |           |             |           |                      |
| 5.  |                 |              |             |                      |           |             |           |                      |

## FLOW CALCULATIONS

| No. | Coefficient (24-Hour) | $\sqrt{h_w P_f}$ | Pressure psia | Flow Temp. Factor F <sub>t</sub> | Gravity Factor F <sub>g</sub> | Compress. Factor F <sub>pv</sub> | Rate of Flow Q-MCFPD @ 15.025 psia |
|-----|-----------------------|------------------|---------------|----------------------------------|-------------------------------|----------------------------------|------------------------------------|
| 1.  | 12.985                |                  | 313           | 1.000                            | 0.9385                        | 1.035                            | 7763                               |
| 2.  |                       |                  |               |                                  |                               |                                  |                                    |
| 3.  |                       |                  |               |                                  |                               |                                  |                                    |
| 4.  |                       |                  |               |                                  |                               |                                  |                                    |
| 5.  |                       |                  |               |                                  |                               |                                  |                                    |

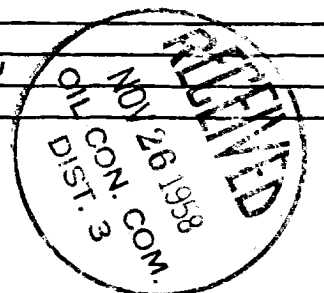
## PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
F<sub>c</sub> \_\_\_\_\_ (1-e<sup>-s</sup>)  
Specific Gravity Separator Gas \_\_\_\_\_  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> 625 P<sub>c</sub> 370.625

| No. | P <sub>w</sub> P <sub>t</sub> (psia) | P <sub>t</sub> <sup>2</sup> | F <sub>c</sub> Q | (F <sub>c</sub> Q) <sup>2</sup> | (F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-s</sup> ) | P <sub>w</sub> <sup>2</sup> | P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup> | Cal. P <sub>w</sub> | P <sub>w</sub> /P <sub>c</sub> |
|-----|--------------------------------------|-----------------------------|------------------|---------------------------------|------------------------------------------------------|-----------------------------|----------------------------------------------------------|---------------------|--------------------------------|
| 1.  |                                      |                             |                  |                                 |                                                      | 103,606                     | 206,961                                                  |                     |                                |
| 2.  |                                      |                             |                  |                                 |                                                      |                             |                                                          |                     |                                |
| 3.  |                                      |                             |                  |                                 |                                                      |                             |                                                          |                     |                                |
| 4.  |                                      |                             |                  |                                 |                                                      |                             |                                                          |                     |                                |
| 5.  |                                      |                             |                  |                                 |                                                      |                             |                                                          |                     |                                |

Absolute Potential: 4892 MCFPD; n 0.65  
COMPANY PAN AMERICAN PETROLEUM CORPORATION  
ADDRESS BOX 407, ALBUQUERQUE, NEW MEXICO  
AGENT and TITLE E. M. BEUNE, JR., FIELD ENGINEER  
WITNESSED \_\_\_\_\_  
COMPANY \_\_\_\_\_

REMARKS



## INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

## NOMENCLATURE

- $Q$  = Actual rate of flow at end of flow period at W. H. working pressure ( $P_w$ ).  
MCF/da. @ 15.025 psia and 60° F.
- $P_c$  = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater.  
psia
- $P_w$  = Static wellhead working pressure as determined at the end of flow period.  
(Casing if flowing thru tubing, tubing if flowing thru casing.) psia
- $P_t$  = Flowing wellhead pressure (tubing if flowing through tubing, casing if  
flowing through casing.) psia
- $P_f$  = Meter pressure, psia.
- $h_w$  = Differential meter pressure, inches water.
- $F_g$  = Gravity correction factor.
- $F_t$  = Flowing temperature correction factor.
- $F_{pv}$  = Supercompressibility factor.
- $n$  = Slope of back pressure curve.

Note: If  $P_w$  cannot be taken because of manner of completion or condition of well, then  $P_w$  must be calculated by adding the pressure drop due to friction within the flow string to  $P_t$ .

| OIL CONSERVATION COMMISSION  |          |                                     |
|------------------------------|----------|-------------------------------------|
| AZTEC DISTRICT OFFICE        |          |                                     |
| No. Copies Received <u>3</u> |          |                                     |
| Date Received _____          |          |                                     |
| Operator                     |          |                                     |
| Santa Fe                     | <u>1</u> |                                     |
| Permit No.                   |          |                                     |
| State Land Office            |          |                                     |
| C. S. & S.                   | <u>1</u> |                                     |
| Transporter                  |          |                                     |
| File                         | <u>1</u> | <input checked="" type="checkbox"/> |