

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE September 26, 1962

|                    |                              |                     |                            |                     |            |              |         |
|--------------------|------------------------------|---------------------|----------------------------|---------------------|------------|--------------|---------|
| Operator           | El Paso Natural Gas Company  | Lease               | Blanco Gas Unit No. 4 (PC) |                     |            |              |         |
| Location           | 2216'S, 1326'W, Sec. 36-28-8 | County              | San Juan                   | State               | New Mexico |              |         |
| Formation          | Pictured Cliff               | Pool                | South Blanco               |                     |            |              |         |
| Casing Diameter    | 7"                           | Set At: Feet        | 2875                       | Tubing: Diameter    | 1.660      | Set At: Feet | 2659    |
| Pay Zones: From    | 2643                         | To                  | 2665                       | Total Depth:        | 2879       | Shut In      | 8-18-62 |
| Stimulation Method | Sand/Water Frac.             | Flow Through Casing | X                          | Flow Through Tubing |            |              |         |

|                           |           |                   |        |                                  |                   |                          |           |                |       |
|---------------------------|-----------|-------------------|--------|----------------------------------|-------------------|--------------------------|-----------|----------------|-------|
| Choke Size, Inches        | 0.75      | Choke Constant: C | 12.365 | Baker Model "N" Packer at 2868'. |                   |                          |           |                |       |
| Shut-In Pressure, Casing, | 1028 (PC) | PSIG + 12 PSIA    | 1040   | Days Shut-In                     | 39                | Shut-In Pressure, Tubing | 1028 (PC) | PSIG + 12 PSIA | 1040  |
| Flowing Pressure: P       | 134       | PSIG + 12 PSIA    | 146    | Working Pressure: Pw             | 136               | PSIG + 12 PSIA           | 148       |                |       |
| Temperature:              | 62 F      | Fv                | .9981  | .85                              | Fpv (From Tables) | 1.013                    | Gravity   | .650 Fg        | .9608 |

Initial SIPT (MV) = 1022 psig

Final SIPT (MV) = 1028 psig

CHOKE VOLUME  $Q = C \times P_i \times F_v \times F_g \times F_{pv}$

$Q = (12.365)(146)(.9981)(.9608)(1.013) = 1754$  MCF/D

OPEN FLOW  $Aof = Q \left( \frac{b_c^2}{P_c^2 - P_w^2} \right)^n$

$Aof = \left( \frac{1,081,600}{1,059,696} \right)^n (1.0206)^{.85} (1754) = (1.0275)(1754)$

Aof 1785 MCF/D

BY D. E. Mortensen

WITNESSED BY

Calculated by T. B. Grant

Checked by W. D. Dawson



Lewis D. Galloway  
Lewis D. Galloway

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE September 19, 1962

|                                                 |                             |                                            |                                 |
|-------------------------------------------------|-----------------------------|--------------------------------------------|---------------------------------|
| Operator<br><b>El Paso Natural Gas Company</b>  |                             | Lease<br><b>Blanco Gas Unit No. 4 (MV)</b> |                                 |
| Location<br><b>2216'S, 1326'W, Sec. 36-28-8</b> |                             | County<br><b>San Juan</b>                  | State<br><b>New Mexico</b>      |
| Formation<br><b>Mesa Verde</b>                  |                             | Pool<br><b>Blanco</b>                      |                                 |
| Casing: Diameter<br><b>5"</b>                   | Set At: Feet<br><b>5088</b> | Tubing: Diameter<br><b>2.0625</b>          | Set At: Feet<br><b>5006</b>     |
| Pay Zone: From<br><b>4290</b>                   | To<br><b>4970</b>           | Total Depth:<br><b>5091</b>                | Shut In<br><b>8-30-62</b>       |
| Stimulation Method<br><b>Sand/Water Frac.</b>   |                             | Flow Through Casing                        | Flow Through Tubing<br><b>X</b> |

|                                               |                                 |                                    |                                                    |                                         |                             |
|-----------------------------------------------|---------------------------------|------------------------------------|----------------------------------------------------|-----------------------------------------|-----------------------------|
| Choke Size, Inches<br><b>.75</b>              |                                 | Choke Constant: C<br><b>12.365</b> |                                                    | <b>Baker Model "N" Packer at 2868'.</b> |                             |
| Shut-In Pressure, Casing,<br><b>(PC) 1024</b> | PSIG - 12 - PSIA<br><b>1036</b> | Days Shut-In<br><b>20</b>          | Shut-In Pressure, Tubing<br><b>(MV) 1033</b>       | PSIG - 12 - PSIA<br><b>1045</b>         |                             |
| Flowing Pressure: P<br><b>172</b>             | PSIG - 12 - PSIA<br><b>184</b>  |                                    | Working Pressure: P <sub>w</sub><br><b>(Calc.)</b> | PSIG - 12 - PSIA<br><b>464</b>          |                             |
| Temperature:<br>T <b>60</b> F                 | F <sub>t</sub> <b>1.000</b>     |                                    | F <sub>pv</sub> (From Tables)<br><b>1.017</b>      | Gravity<br><b>.650</b>                  | F <sub>g</sub> <b>.9608</b> |

Initial SIPT (PC) = 1023 psig

Final SIPC (PC) = 1026 psig

CHOKE VOLUME  $Q = C \times P_r \times F_t \times F_g \times F_{pv}$

$$Q = (12.365)(184)(1.000)(.9608)(1.017)$$

2223

MCF/D

OPEN FLOW Aof  $Q \left( \frac{P_c^2}{P_c^2 - P_w^2} \right)^n$

$$Aof \left( \frac{1,092,025}{876,729} \right)^n = (2223)(1.2455)^{.75} = (2223)(1.1788)$$

NOTE: Blew slight Mist.

Aof

2620

MCF/D

TESTED BY D. E. Mortensen

WITNESSED BY

Calculated by W. D. Dawson

Checked by T. B. Grant



Lewis D. Galloway  
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