

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS

**RECEIVED**  
JUL 25 1985  
OIL CON. DIV.  
DIST. 3

|                                                                                                                                      |                                                    |                                      |                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------------------|--------------------------------------------------------------------------------------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input checked="" type="checkbox"/> Special |                                                    | Test Date<br>7-5-85                  |                                                                                      |
| Company<br>Amoco Production                                                                                                          |                                                    | Connection<br>El Paso Natural Gas Co |                                                                                      |
| Pool<br>Basin                                                                                                                        |                                                    | Formation<br>Dakota                  |                                                                                      |
| Completion Date<br>6-27-85                                                                                                           | Total Depth<br>7201                                | Plug Back TD<br>7184                 | Elevation<br>5704 GR                                                                 |
| Coq. Size<br>4.500                                                                                                                   | Wt.<br>11.6                                        | d<br>4.000                           | Set At<br>7201                                                                       |
| Perforations:<br>From 6856 To 7178                                                                                                   | Well No.<br>1E                                     |                                      |                                                                                      |
| Tbg. Size<br>2.375                                                                                                                   | Wt.<br>4.7                                         | d<br>1.995                           | Set At<br>7168                                                                       |
| Perforations:<br>From open To ended                                                                                                  | Unit    Sec.    Twp.    Rge.<br>E    35    30    9 |                                      |                                                                                      |
| Type Well - Single - Broadhead - G.C. or G.O. Multiple<br>single                                                                     |                                                    | Packer Set At<br>none                |                                                                                      |
| Producing Thru<br>tubing                                                                                                             |                                                    | Reservoir Temp. °F<br>#              |                                                                                      |
| Mean Annual Temp. °F                                                                                                                 |                                                    | Baro. Press. - P <sub>a</sub>        |                                                                                      |
| State<br>New Mexico                                                                                                                  |                                                    | County<br>San Juan                   |                                                                                      |
| L                                                                                                                                    | H                                                  | Gg                                   | % CO <sub>2</sub> % N <sub>2</sub> % H <sub>2</sub> S    Prover    Meter Run    Taps |

  

| FLOW DATA |                  |      |              |                 |                      | TUBING DATA |                 | CASING DATA |                 | Duration of Flow |
|-----------|------------------|------|--------------|-----------------|----------------------|-------------|-----------------|-------------|-----------------|------------------|
| NO.       | Prover Line Size | X    | Orifice Size | Press. p.s.i.g. | Diff. h <sub>w</sub> | Temp. °F    | Press. p.s.i.g. | Temp. °F    | Press. p.s.i.g. |                  |
| SI        | 8 days           |      |              |                 |                      |             | 1850            |             | 2090            |                  |
| 1.        | 2.375            | .750 |              |                 |                      |             | 55              |             | 340             |                  |
| 2.        |                  |      |              |                 |                      |             |                 |             |                 |                  |
| 3.        |                  |      |              |                 |                      |             |                 |             |                 |                  |
| 4.        |                  |      |              |                 |                      |             |                 |             |                 |                  |
| 5.        |                  |      |              |                 |                      |             |                 |             |                 |                  |

  

| RATE OF FLOW CALCULATIONS |                       |                  |                         |                       |                   |                             |                      |
|---------------------------|-----------------------|------------------|-------------------------|-----------------------|-------------------|-----------------------------|----------------------|
| NO.                       | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure P <sub>m</sub> | Flow Temp. Factor Ft. | Gravity Factor Fg | Super Compress. Factor, Fpv | Rate of Flow Q, Mcfd |
| 1                         | 12.365                |                  | 67                      | 1.000                 | .9258             | 1.004                       | 770                  |
| 2.                        |                       |                  |                         |                       |                   |                             |                      |
| 3.                        |                       |                  |                         |                       |                   |                             |                      |
| 4.                        |                       |                  |                         |                       |                   |                             |                      |
| 5.                        |                       |                  |                         |                       |                   |                             |                      |

  

| NO. | R <sub>i</sub> | Temp. °R | T <sub>i</sub> | Z | Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.          |
|-----|----------------|----------|----------------|---|------------------------------------------------------|
| 1   |                |          |                |   | A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.     |
| 2.  |                |          |                |   | Specific Gravity Separator Gas _____ X X X X X X X X |
| 3.  |                |          |                |   | Specific Gravity Flowing Fluid _____ X X X X X       |
| 4.  |                |          |                |   | Critical Pressure _____ P.S.I.A. _____ P.S.I.A.      |
| 5.  |                |          |                |   | Critical Temperature _____ R _____ R                 |

  

|                                               |                                                                                                                                               |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| P <sub>c</sub> 2102    P <sub>w</sub> 4418404 |                                                                                                                                               |
| NO.                                           | P <sub>i</sub> <sup>2</sup> P <sub>w</sub> <sup>2</sup> P <sub>w</sub> <sup>2</sup> P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> |
| 1                                             | 352    123904    4294500                                                                                                                      |
| 2                                             |                                                                                                                                               |
| 3                                             |                                                                                                                                               |
| 4                                             |                                                                                                                                               |
| 5                                             |                                                                                                                                               |

  

(1)  $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0289$

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 787$

(2)  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0216$

  

|                        |                |                  |              |
|------------------------|----------------|------------------|--------------|
| Absolute Open Flow 787 | Mcf/d @ 15.025 | Angle of Slope @ | Slope, n .75 |
|------------------------|----------------|------------------|--------------|

  

Remarks: Flared, Lite H2O, Lite Condensate

  

|                      |                              |                             |                       |
|----------------------|------------------------------|-----------------------------|-----------------------|
| Approved By Division | Conducted By: Bryan Services | Calculated By: J.J. Barnett | Checked By: <i>CS</i> |
|----------------------|------------------------------|-----------------------------|-----------------------|