

NEW MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122  
Revised 9-1-65

**RECEIVED**

|                                                                                                                           |            |                         |                |                                     |  |                                     |  |
|---------------------------------------------------------------------------------------------------------------------------|------------|-------------------------|----------------|-------------------------------------|--|-------------------------------------|--|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |            |                         |                | Test Date<br>9-27-85                |  | OCT 01 1985                         |  |
| Company<br>El Paso Natural Gas                                                                                            |            |                         |                | Connection                          |  | OIL CON. DIV.                       |  |
| Foot<br>Blanco                                                                                                            |            |                         |                | Formation<br>Mesa Verde             |  | Unit<br>DIST. 3                     |  |
| Completion Date<br>9-27-85                                                                                                |            | Total Depth<br>5400     |                | Plug Back TD<br>5388                |  | Elevation<br>6283 GR                |  |
| Form or Lease Name<br>Howell                                                                                              |            |                         |                | Well No.<br>#4A                     |  |                                     |  |
| Coq. Size<br>7.000                                                                                                        | wt.<br>20  | d<br>.6456              | Set At<br>3030 | Perforations:<br>From *4365 To 5350 |  | Unit<br>J                           |  |
| Req. Size<br>2.375                                                                                                        | wt.<br>4.7 | d<br>1.995              | Set At<br>5333 | Perforations:<br>From To            |  | Sec. 27 Twp. 28 Rge. 08             |  |
| Type Well - Single - Bradenhead - G.C. or G.O. Multiple<br>Single                                                         |            |                         |                | Packer Set At<br>None               |  | County<br>San Juan                  |  |
| Producing Thru<br>Tbg.                                                                                                    |            | Reservoir Temp. *F<br>a |                | Mean Annual Temp. *F                |  | Baro. Press. - P <sub>a</sub><br>12 |  |
| L                                                                                                                         |            | H                       |                | Gg<br>.680                          |  | State<br>New Mexico                 |  |
|                                                                                                                           |            |                         |                | % CO <sub>2</sub>                   |  | % N <sub>2</sub>                    |  |
|                                                                                                                           |            |                         |                | % H <sub>2</sub> S                  |  | Prover                              |  |
|                                                                                                                           |            |                         |                |                                     |  | Meter Run                           |  |
|                                                                                                                           |            |                         |                |                                     |  | Taps                                |  |

  

| FLOW DATA |                  |      |              |                 |                      | TUBING DATA |                 | CASING DATA |                 | Duration |         |
|-----------|------------------|------|--------------|-----------------|----------------------|-------------|-----------------|-------------|-----------------|----------|---------|
| 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. | Temp. *F | of Flow |
| 51        |                  |      |              |                 |                      |             | 837             |             | 930             |          | 7 Days  |
| 1.        |                  | .750 |              | 299             |                      | 70          | 299             |             | 702             |          | 3 Hrs   |
| 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                |                  | 311                     | .9905                 | .9393             | 1.029                      | 3682                 |
| 2                         |                       |                  |                         |                       |                   |                            |                      |
| 3                         |                       |                  |                         |                       |                   |                            |                      |
| 4                         |                       |                  |                         |                       |                   |                            |                      |
| 5                         |                       |                  |                         |                       |                   |                            |                      |

  

|     |                |          |                |   |                                                      |
|-----|----------------|----------|----------------|---|------------------------------------------------------|
| NO. | P <sub>r</sub> | Temp. *R | T <sub>r</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>r</sub> 942 | P <sub>r</sub> <sup>2</sup> 887364 | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{887364}{377568}$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.8981$      |
| NO. 1              | P <sub>r</sub> 714                 | P <sub>w</sub> 509796                                     | P <sub>r</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> 377568 |
| 2                  |                                    |                                                           |                                                                  |
| 3                  |                                    |                                                           |                                                                  |
| 4                  |                                    |                                                           |                                                                  |
| 5                  |                                    |                                                           |                                                                  |

  

|                                                                          |  |                                     |  |
|--------------------------------------------------------------------------|--|-------------------------------------|--|
| Absolute Open Flow 6989 Mcfd @ 15.025                                    |  | Angle of Slope @ _____ Slope, n .75 |  |
| Remarks: *4.500' liner 2835'-5400'.<br>Gas vented during test = 508 MCF. |  |                                     |  |

  

|                         |                           |                        |                 |
|-------------------------|---------------------------|------------------------|-----------------|
| Approved by Commission: | Conducted By: John Easley | Calculated By: Ed Mabe | Checked By: kid |
|-------------------------|---------------------------|------------------------|-----------------|