

EV XICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122  
Revised 9-1-65

|                                                                                                                        |                   |                                |                       |                                                  |                    |                                              |                        |                                          |                   |
|------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------------------|-----------------------|--------------------------------------------------|--------------------|----------------------------------------------|------------------------|------------------------------------------|-------------------|
| Type Test <input type="checkbox"/> Initial <input type="checkbox"/> Annual <input checked="" type="checkbox"/> Special |                   |                                |                       |                                                  |                    | Test Date<br>1-10-69                         |                        |                                          |                   |
| Company<br><b>El Paso Natural Gas Company</b>                                                                          |                   |                                |                       | Connection<br><b>El Paso Natural Gas Company</b> |                    |                                              |                        |                                          |                   |
| Pool<br><b>Jalmat</b>                                                                                                  |                   |                                |                       | Formation<br><b>Yates-Seven Rivers</b>           |                    |                                              |                        | Unit                                     |                   |
| Completion Date<br><b>April 15, 1937</b>                                                                               |                   | Total Depth                    |                       | Plug Back TD                                     |                    | Elevation                                    |                        | Farm or Lease Name<br><b>Shell Black</b> |                   |
| Csg. Size<br><b>6 5/8</b>                                                                                              | Wt.<br><b>20</b>  | d<br><b>6.049</b>              | Set At<br><b>3214</b> | Perforations:<br>From <b>2898</b> To <b>3076</b> |                    | Well No.<br><b>2</b>                         |                        |                                          |                   |
| Tbg. Size<br><b>2 1/2</b>                                                                                              | Wt.<br><b>6.5</b> | d<br><b>2.441</b>              | Set At<br><b>3068</b> | Perforations:<br>From To                         |                    | Unit<br><b>0</b>                             | Sec.<br><b>21</b>      | Twp.<br><b>24</b>                        | Rge.<br><b>37</b> |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br><b>Single</b>                                               |                   |                                |                       | Packer Set At<br><b>None</b>                     |                    | County<br><b>Lea</b>                         |                        |                                          |                   |
| Producing Thru<br><b>Tbg.</b>                                                                                          |                   | Reservoir Temp. °F<br><b>@</b> |                       | Mean Annual Temp. °F                             |                    | Baro. Press. - P <sub>a</sub><br><b>13.2</b> |                        | State<br><b>New Mexico</b>               |                   |
| L                                                                                                                      | H                 | Gg<br><b>.661</b>              | % CO <sub>2</sub>     | % N <sub>2</sub>                                 | % H <sub>2</sub> S | Prover                                       | Meter Run<br><b>4"</b> | Taps<br><b>Fig.</b>                      |                   |

  

| 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        |                  |   |              |                 |                      |             | <b>325</b>      |             | <b>353</b>      |                  |
| 1.        | 4                | x | 1.250        | 46              | 22.70                | 67          | 47              | 66          | 82              | 24               |
| 2.        | 4                | x | 1.250        | 36              | 26.01                | 61          | 86              | 58          | 128             | 24               |
| 3.        | 4                | x | 1.250        | 32              | 21.16                | 67          | 121             | 65          | 177             | 24               |
| 4.        | 4                | x | 1.250        | 29              | 13.61                | 48          | 160             | 47          | 207             |                  |
| 5.        | 4                | x | 1.250        | 21              | 9.61                 | 42          | 198             | 44          | 239             |                  |

  

| 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                         | 7.469                 | 41.97            | 5.2                     | .933                  | 1.230             |                             | 383                  |
| 2                         | 7.469                 | 35.70            | 4.2                     | .990                  | 1.230             |                             | 328                  |
| 3                         | 7.469                 | 30.82            | 45.2                    | .933                  | 1.230             |                             | 281                  |
| 4                         | 7.469                 | 24.42            | 42.2                    | .912                  | 1.230             |                             | 227                  |
| 5                         | 7.469                 | 17.98            | 34.2                    | 1.018                 | 1.230             |                             | 168                  |

  

|     |                |          |                |   |                                                                                        |
|-----|----------------|----------|----------------|---|----------------------------------------------------------------------------------------|
| NO. | P <sub>t</sub> | Temp. °R | T <sub>f</sub> | Z | Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.                                            |
| 1.  |                |          |                |   | A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.                                       |
| 2.  |                |          |                |   | Specific Gravity Separator Gas <b>.661</b> <span style="float:right">XXXXXXXXXX</span> |
| 3.  |                |          |                |   | Specific Gravity Flowing Fluid <span style="float:right">XXXXXX</span>                 |
| 4.  |                |          |                |   | Critical Pressure <b>670</b> P.S.I.A. <span style="float:right">P.S.I.A.</span>        |
| 5.  |                |          |                |   | Critical Temperature <b>378</b> R <span style="float:right">R</span>                   |

  

|                             |                                          |                |                             |
|-----------------------------|------------------------------------------|----------------|-----------------------------|
| P <sub>c</sub> <b>366.2</b> | P <sub>c</sub> <sup>2</sup> <b>134.1</b> |                |                             |
| NO.                         | P <sub>t</sub> <sup>2</sup>              | P <sub>w</sub> | P <sub>w</sub> <sup>2</sup> |
| 1                           | <b>3.6</b>                               | <b>95.2</b>    | <b>9.1</b>                  |
| 2                           | <b>9.8</b>                               | <b>141.2</b>   | <b>19.9</b>                 |
| 3                           | <b>20.2</b>                              | <b>190.2</b>   | <b>36.2</b>                 |
| 4                           | <b>30.0</b>                              | <b>220.2</b>   | <b>48.5</b>                 |
| 5                           | <b>44.6</b>                              | <b>252.2</b>   | <b>63.6</b>                 |

  

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.073$$

$$AOF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 411$$

$$(2) \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.073$$

  

|                                             |                          |                                           |
|---------------------------------------------|--------------------------|-------------------------------------------|
| Absolute Open Flow <b>411</b> Mcfd @ 15.025 | Angle of Slope <b>45</b> | Slope, n <b>1.000</b>                     |
| Remarks:                                    |                          |                                           |
| Approved By Commission:                     | Conducted By:            | Calculated By: <b>Jack T. Littlefield</b> |
|                                             |                          | Checked By: <b>Earl G. Smith</b>          |