

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

Form C-122  
Revised 9-1-65

|                                                                                                                           |            |                         |                   |                                                               |                    |                                   |                    |                                      |             |
|---------------------------------------------------------------------------------------------------------------------------|------------|-------------------------|-------------------|---------------------------------------------------------------|--------------------|-----------------------------------|--------------------|--------------------------------------|-------------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |            |                         |                   |                                                               |                    | Test Date<br>4-1-81               |                    |                                      |             |
| Company<br>SHELL OIL COMPANY                                                                                              |            |                         |                   | Connection                                                    |                    |                                   |                    |                                      |             |
| Pool<br>ANTELOPE RIDGE #7                                                                                                 |            |                         |                   | Formation<br>MORROW                                           |                    |                                   |                    | Unit<br>ANTELOPE RIDGE UNIT          |             |
| Completion Date<br>4-1-81                                                                                                 |            | Total Depth<br>13,575'  |                   | Plug Back TD<br>13,490'                                       |                    | Elevation<br>3475' (GL)           |                    | Farm or Lease Name<br>ANTELOPE RIDGE |             |
| Csg. Size                                                                                                                 | Wt.        | d                       | Set At            | Perforations:<br>From                      To                 |                    | Well No.<br>7                     |                    |                                      |             |
| Tbg. Size<br>2 7/8"                                                                                                       | Wt.<br>6.5 | d                       | Set At<br>13,160' | Perforations:<br>From 13,182'                      To 13,413' |                    | Unit<br>27                        |                    | Sec.<br>23S                          | Rge.<br>34E |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>SINGLE                                                         |            |                         |                   |                                                               |                    | Packer Set At<br>11,340', 13,140' |                    | County<br>LEA                        |             |
| Producing Thru<br>TUBING                                                                                                  |            | Reservoir Temp. °F<br>@ |                   | Mean Annual Temp. °F                                          |                    | Baro. Press. - P <sub>a</sub>     |                    | State<br>NEW MEXICO                  |             |
| L                                                                                                                         | H          | Gg                      | % CO <sub>2</sub> | % N <sub>2</sub>                                              | % H <sub>2</sub> S | Prover                            | Meter Run<br>4.026 | 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. |                  | Temp. °F |
| SI        | 4.026            | X | 1.250        |                 |                      |             | 1725            | 62          |                 |                  | 72 hrs   |
| 1.        | 4.026            | X | 1.250        | 545             | 4                    | 81          | 1375            | 75          | PACKER          |                  | 1 hr.    |
| 2.        | 4.026            | X | 1.250        | 545             | 15                   | 78          | 677             | 75          |                 |                  | 1 hr.    |
| 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                         | 7.469                 | 47.25            | 558.2                   | .9804                 | 1.304             | 1.048                       | 473                  |
| 2                         | 7.469                 | 91.50            | 558.2                   | .9831                 | 1.304             | 1.048                       | 918                  |
| 3.                        |                       |                  |                         |                       |                   |                             |                      |
| 4.                        |                       |                  |                         |                       |                   |                             |                      |
| 5.                        |                       |                  |                         |                       |                   |                             |                      |

  

|     |                |          |                |      |                                                                                         |
|-----|----------------|----------|----------------|------|-----------------------------------------------------------------------------------------|
| NO. | P <sub>r</sub> | Temp. °R | T <sub>r</sub> | Z    | Gas Liquid Hydrocarbon Ratio <u>NO FLUID</u> Mcf/bbl.                                   |
| 1   | .83            | 541      | 1.55           | .927 | A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.                                        |
| 2.  | .83            | 538      | 1.55           | .927 | Specific Gravity Separator Gas <u>0.588</u> <span style="float:right">XXXXXXXXXX</span> |
| 3.  |                |          |                |      | Specific Gravity Flowing Fluid <u>XXXXX</u> <span style="float:right">NO FLUID</span>   |
| 4.  |                |          |                |      | Critical Pressure <u>672</u> P.S.I.A. <span style="float:right">P.S.I.A.</span>         |
| 5.  |                |          |                |      | Critical Temperature <u>350</u> R <span style="float:right">R</span>                    |

  

|                                                                        |                             |                |                             |                                                           |                                                            |
|------------------------------------------------------------------------|-----------------------------|----------------|-----------------------------|-----------------------------------------------------------|------------------------------------------------------------|
| P <sub>c</sub> <u>2254.2</u> P <sub>c</sub> <sup>2</sup> <u>5081.4</u> |                             |                |                             | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.127$                 | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.576$ |
| NO.                                                                    | P <sub>t</sub> <sup>2</sup> | P <sub>w</sub> | P <sub>w</sub> <sup>2</sup> | P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> |                                                            |
| 1                                                                      |                             | 1962.2         | 3850.2                      | 1231.2                                                    |                                                            |
| 2                                                                      |                             | 1675.6         | 2806.2                      | 2275.0                                                    |                                                            |
| 3                                                                      |                             |                |                             |                                                           |                                                            |
| 4                                                                      |                             |                |                             |                                                           |                                                            |
| 5                                                                      |                             |                |                             |                                                           |                                                            |

  

|                                              |  |  |  |                               |                       |
|----------------------------------------------|--|--|--|-------------------------------|-----------------------|
| Absolute Open Flow <u>1691</u> Mcfd @ 15.025 |  |  |  | Angle of Slope $\theta$ _____ | Slope, n <u>0.899</u> |
|----------------------------------------------|--|--|--|-------------------------------|-----------------------|

  

|                                                                               |  |
|-------------------------------------------------------------------------------|--|
| Remarks: <u>BHP TAKEN WITH AMERADA BOMB. WELL DIED WHEN #2 RATE FINISHED.</u> |  |
|-------------------------------------------------------------------------------|--|

  

|                         |               |                |             |
|-------------------------|---------------|----------------|-------------|
| Approved By Commission: | Conducted By: | Calculated By: | Checked By: |
|-------------------------|---------------|----------------|-------------|