

45P  
File

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL RECEIVED

|                                                                                                                           |              |                                               |                           |                                        |                         |
|---------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------------------|---------------------------|----------------------------------------|-------------------------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |              | Test Date<br>5/11/88                          |                           | MAY 24 '88                             |                         |
| Company<br>Enron Oil & Gas Company                                                                                        |              | Connection<br>None                            |                           |                                        |                         |
| Pool<br>Salt Dome #1 (Wildecat)                                                                                           |              | Formation<br>Strawn                           |                           | Unit<br>O.C.D. ARTESIA OFFICE          |                         |
| Completion Date<br>5/5/88                                                                                                 |              | Total Depth<br>13650'                         |                           | Plug Back TD<br>11975'                 |                         |
| Elevation<br>2925' GL                                                                                                     |              | Farm or Lease Name<br>Queen Lake 36 State Com |                           | Well No.<br>1                          |                         |
| Ceq. Size<br>5 1/2"                                                                                                       | Wt.<br>20.0# | d<br>4.778                                    | Set At<br>12470'          | Perforations:<br>From 11930' To 11934' |                         |
| Trg. Size<br>2 7/8"                                                                                                       | Wt.<br>6.5#  | d<br>2.441                                    | Set At<br>10016'          | Perforations:<br>From Open To Ended    |                         |
| Type Well - Single - Brdenhead - G.G. or G.O. Multiple<br>Single                                                          |              |                                               |                           | Packer Set At<br>10016'                |                         |
| Producing Thru<br>Tbg                                                                                                     |              | Reservoir Temp. °F<br>175 @ 11932             |                           | Mean Annual Temp. °F<br>60°            |                         |
| Baro. Press. - P <sub>g</sub><br>13.2                                                                                     |              | State<br>New Mexico                           |                           |                                        |                         |
| L<br>11930                                                                                                                | H<br>11930   | Cg<br>0.665                                   | % CO <sub>2</sub><br>0.26 | % N <sub>2</sub><br>0.47               | % H <sub>2</sub> S<br>0 |
| Prover<br>-                                                                                                               |              | Meter Run<br>4.026                            |                           | Tups<br>Flg                            |                         |

| FLOW DATA |                        |         |                 |                    |                         |             | TUBING DATA        |             | CASING DATA        |             | Duration<br>of<br>Flow |
|-----------|------------------------|---------|-----------------|--------------------|-------------------------|-------------|--------------------|-------------|--------------------|-------------|------------------------|
| NO.       | Prover<br>Line<br>Size | x       | Orifice<br>Size | Press.<br>p.s.i.g. | Diff.<br>h <sub>w</sub> | Temp.<br>°F | Press.<br>p.s.i.g. | Temp.<br>°F | Press.<br>p.s.i.g. | Temp.<br>°F |                        |
| SI        |                        |         |                 |                    |                         |             | 6865               | 60          | PACKER             |             | 143 hrs                |
| 1.        | 4.026                  | 6/64    | 1.750           | 560                | 4                       | 88          | 6795               | 60          |                    |             | 1.0 hr                 |
| 2.        | 4.026                  | 8/64    | 1.750           | 600                | 20                      | 89          | 6650               | 60          |                    |             | 1.0 hr                 |
| 3.        | 4.026                  | 9.5/64  | 1.750           | 580                | 44                      | 84          | 6535               | 60          |                    |             | 1.0 hr                 |
| 4.        | 4.026                  | 10.5/64 | 1.750           | 590                | 84                      | 78          | 6355               | 60          |                    |             | 1.0 hr                 |
| 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 F <sub>g</sub> | Super Compress. Factor, F <sub>pv</sub> | Rate of Flow Q, Mscf |
|-----|-----------------------|------------------|-------------------------|-----------------------|-------------------------------|-----------------------------------------|----------------------|
| 1   | 14.93                 | 47.88            | 573.2                   | 0.9741                | 1.226                         | 1.059                                   | 904                  |
| 2   | 14.93                 | 110.74           | 613.2                   | 0.9732                | 1.226                         | 1.056                                   | 2083                 |
| 3   | 14.93                 | 161.56           | 593.2                   | 0.9777                | 1.226                         | 1.061                                   | 3068                 |
| 4   | 14.93                 | 225.10           | 603.2                   | 0.9831                | 1.226                         | 1.062                                   | 4302                 |
| 5.  |                       |                  |                         |                       |                               |                                         |                      |

| NO. | R    | Temp. °R | T <sub>r</sub> | Z     | Gas Liquid Hydrocarbon Ratio | A.P.I. Gravity of Liquid Hydrocarbons | Specific Gravity Separator Gas | Specific Gravity Flowing Fluid | Critical Pressure | Critical Temperature |
|-----|------|----------|----------------|-------|------------------------------|---------------------------------------|--------------------------------|--------------------------------|-------------------|----------------------|
| 1   | 0.86 | 548      | 1.45           | 0.892 | 863.1                        | 57 @ 60                               | 0.665                          | X X X X X X X X                | 670               | 378                  |
| 2   | 0.92 | 549      | 1.45           | 0.897 |                              |                                       |                                | X X X X X                      | 670               | 378                  |
| 3   | 0.89 | 544      | 1.44           | 0.888 |                              |                                       |                                |                                |                   |                      |
| 4   | 0.90 | 538      | 1.42           | 0.887 |                              |                                       |                                |                                |                   |                      |
| 5   |      |          |                |       |                              |                                       |                                |                                |                   |                      |

| P <sub>c</sub> 6878.2 | P <sub>c</sub> <sup>2</sup> 47309.6 |                |                             |                                                           |                                           |                                                            |  |  |  |  |
|-----------------------|-------------------------------------|----------------|-----------------------------|-----------------------------------------------------------|-------------------------------------------|------------------------------------------------------------|--|--|--|--|
| NO.                   | P <sub>i</sub> <sup>2</sup>         | P <sub>w</sub> | P <sub>w</sub> <sup>2</sup> | P <sub>i</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> | (1) $\frac{P_c^2}{P_i^2 - P_w^2} = 7.338$ | (2) $\left[ \frac{P_c^2}{P_i^2 - P_w^2} \right]^n = 6.434$ |  |  |  |  |
| 1                     |                                     | 6808.9         | 46361.1                     | 948.5                                                     |                                           |                                                            |  |  |  |  |
| 2                     |                                     | 6671.1         | 44503.6                     | 2806.0                                                    |                                           |                                                            |  |  |  |  |
| 3                     |                                     | 6556.2         | 42983.8                     | 4325.8                                                    |                                           |                                                            |  |  |  |  |
| 4                     |                                     | 6392.4         | 40862.8                     | 6446.8                                                    |                                           |                                                            |  |  |  |  |
| 5                     |                                     |                |                             |                                                           |                                           |                                                            |  |  |  |  |

|                    |                                                  |               |                  |    |          |       |
|--------------------|--------------------------------------------------|---------------|------------------|----|----------|-------|
| Absolute Open Flow | 27,679                                           | Mscf @ 15.025 | Angle of Slope @ | 47 | Slope, n | 0.934 |
| Remarks:           | WELL PRODUCED .5 BBL. 57° CONDENSATE DURING TEST |               |                  |    |          |       |

|                      |                       |                |  |
|----------------------|-----------------------|----------------|--|
| Approved By Division | Conducted By:         | Calculated By: |  |
|                      | JARREL SERVICES, INC. |                |  |

Post ID-2  
6-17-88  
comp & BK