

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

Form C-122  
 Revised 9-1-65

|                                                                                                                        |            |                                |                           |                                    |                         |                                       |                                   |                                    |
|------------------------------------------------------------------------------------------------------------------------|------------|--------------------------------|---------------------------|------------------------------------|-------------------------|---------------------------------------|-----------------------------------|------------------------------------|
| Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |            |                                |                           |                                    | Test Date<br>4-25-85    |                                       |                                   |                                    |
| Company<br>MORIOLCO                                                                                                    |            |                                |                           | Connection<br>TO AIR NEW WELL      |                         |                                       |                                   |                                    |
| Pool<br>UD SEVEN RIVERS                                                                                                |            |                                |                           | Formation<br>SEVEN RIVERS          |                         |                                       |                                   | Unit<br>A                          |
| Completion Date<br>6-22-84                                                                                             |            | Total Depth<br>5200            |                           | Plug Back To<br>3950               |                         | Elevation<br>3195                     |                                   | Form or Lease Name<br>STIVASON FED |
| Line Size<br>4.500                                                                                                     | Wt.<br>9.5 | d<br>4.090                     | Set At<br>3950            | Perforations:<br>From 3909 To 3914 |                         |                                       | Well No.<br>1                     |                                    |
| Line Size<br>2.375                                                                                                     | Wt.<br>4.7 | d<br>1.995                     | Set At<br>3842            | Perforations:<br>From 0 To 0       |                         |                                       | Unit Sec. Twp. Rge.<br>33 19S 34E |                                    |
| Type Well - Single - Windhead - G.G. or G.O. Multiple<br>SINGLE                                                        |            |                                |                           |                                    | Packer Set At<br>3842   |                                       | County<br>LEA                     |                                    |
| Producing thru<br>TUBING                                                                                               |            | Reservoir Temp. °F<br>114 3911 |                           | Mean Annual Temp. °F<br>60.0       |                         | Euro. Press. - P <sub>0</sub><br>13.2 |                                   | State<br>NEW MEXICO                |
| L<br>3911                                                                                                              | H<br>3911  | Cg<br>0.694                    | % CO <sub>2</sub><br>0.12 | % N <sub>2</sub><br>7.49           | % H <sub>2</sub> S<br>0 | Provor<br>0                           | Meter Run<br>3.1                  | Tape<br>FLANGE                     |

  

| FLOW DATA |                  |   |              |                 |                      |          | TUBING DATA     |          | B.H.P. DATA     |       | Duration of Flow |
|-----------|------------------|---|--------------|-----------------|----------------------|----------|-----------------|----------|-----------------|-------|------------------|
| NO.       | Provor 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. | CHOKE |                  |
| 51        |                  |   |              |                 |                      |          | 1332.2          | 114      | 1500            |       | 72.0             |
| 1.        | 3.07 X 1.250     |   |              | 320             | 8.0                  | 100      | 1307.2          | 114      | 1460            | 6/64  | 1.0              |
| 2.        | 3.07 X 1.250     |   |              | 340             | 20.0                 | 76       | 1250.2          | 114      | 1410            | 10/64 | 1.0              |
| 3.        | 3.07 X 1.250     |   |              | 340             | 46.0                 | 92       | 1187.2          | 114      | 1338            | 15/64 | 1.0              |
| 4.        | 3.07 X 1.250     |   |              | 340             | 90.0                 | 80       | 1065.2          | 114      | 1260            | 18/64 | 1.0              |
| 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 O. Mcd |
| 1                         | 7.58                  | 51.63            | 333.2                   | 0.9636                | 1.2004            | 1.0255                       | 464                 |
| 2                         | 7.58                  | 84.05            | 353.2                   | 0.9850                | 1.2004            | 1.0322                       | 777                 |
| 3                         | 7.58                  | 127.46           | 353.2                   | 0.9706                | 1.2004            | 1.0283                       | 1157                |
| 4                         | 7.58                  | 178.29           | 353.2                   | 0.9813                | 1.2004            | 1.0312                       | 1641                |
| 5                         |                       |                  |                         |                       |                   |                              |                     |

  

| NO. | P <sub>1</sub> | Temp. °R | T <sub>1</sub> | Z     | Gas Liquid Hydrocarbon Ratio | Mcf/bbl.     |
|-----|----------------|----------|----------------|-------|------------------------------|--------------|
| 1   | 0.51           | 560      | 1.52           | 0.951 | 270.2                        |              |
| 2   | 0.54           | 536      | 1.46           | 0.939 | 46.0                         |              |
| 3   | 0.54           | 552      | 1.50           | 0.946 | 0.694                        | XXXXXXX      |
| 4   | 0.54           | 540      | 1.47           | 0.940 | XXXXX                        | 0.705        |
| 5   |                |          |                |       | 655                          | 655 P.S.I.A. |
|     |                |          |                |       | 367                          | 371 P.S.I.A. |

  

| NO. | P <sub>1</sub> <sup>2</sup> | P <sub>w</sub> | P <sub>w</sub> <sup>2</sup> | P <sub>1</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> | (1) $\frac{P_c^2}{P_1^2 - P_w^2} = 3.4817$                      | (2) $\left[ \frac{P_c^2}{P_1^2 - P_w^2} \right]^n = 2.7469$ |
|-----|-----------------------------|----------------|-----------------------------|-----------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|
| 1   | 2170                        | 1309           | 1714                        | 92                                                        | $AOI = Q \left[ \frac{P_c^2}{P_1^2 - P_w^2} \right]^n = 4507.6$ |                                                             |
| 2   | 2025                        | 1266           | 1602                        | 205                                                       |                                                                 |                                                             |
| 3   | 1826                        | 1203           | 1447                        | 359                                                       |                                                                 |                                                             |
| 4   | 1621                        | 1135           | 1288                        | 519                                                       |                                                                 |                                                             |
| 5   |                             |                |                             |                                                           |                                                                 |                                                             |

  

|                                                         |  |                     |  |                |  |
|---------------------------------------------------------|--|---------------------|--|----------------|--|
| Absolute Open Flow 4508 Mcfd @ 15.025                   |  | Angle of Slope 51.0 |  | Slope, n 0.810 |  |
| Remarks: B.H.P. MEASURED WITH AMERADA PRESSURE ELEMENTS |  |                     |  |                |  |

  

|                         |                                   |                                   |             |
|-------------------------|-----------------------------------|-----------------------------------|-------------|
| Approved By Commission: | Conducted By:<br>BENNETT & CATHEY | Calculated By:<br>RICHARD TOWNLEY | Checked By: |
|-------------------------|-----------------------------------|-----------------------------------|-------------|

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