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See Rule 401 & Rule 1122

## OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

SEP 20 1991.

OIL CON. DIV.  
DIST. 3

## MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

|                                                                                                                           |  |                      |  |                                 |  |                                      |  |
|---------------------------------------------------------------------------------------------------------------------------|--|----------------------|--|---------------------------------|--|--------------------------------------|--|
| Operator<br>Dugan Production Corp.                                                                                        |  |                      |  | Lease or Unit Name<br>Jeter Com |  |                                      |  |
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |  |                      |  | Test Date<br>9-9-91             |  | Well No.<br>2                        |  |
| Completion Date<br>8-16-91                                                                                                |  | Total Depth<br>1295' |  | Plug Back TD<br>1221'           |  | Elevation                            |  |
| Csg. Size<br>4½"                                                                                                          |  | Wt.<br>10.5          |  | d<br>4.052                      |  | Set At<br>1275'                      |  |
| Tbg. Size<br>2-3/8"                                                                                                       |  | Wt.<br>4.7           |  | d<br>1.995                      |  | Set At<br>1182'                      |  |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>single                                                         |  |                      |  | Packer Set At<br>-----          |  | Formation<br>Fruitland Coal          |  |
| Producing Thru<br>tubing                                                                                                  |  | Reservoir Temp. °F   |  | Mean Annual Temp. °F            |  | Baro. Press - P <sub>a</sub><br>12.2 |  |
| L                                                                                                                         |  | H                    |  | Gg                              |  | % CO <sub>2</sub>                    |  |
|                                                                                                                           |  |                      |  |                                 |  | % N <sub>2</sub>                     |  |
|                                                                                                                           |  |                      |  |                                 |  | % H <sub>2</sub> S                   |  |
|                                                                                                                           |  |                      |  |                                 |  | Prover                               |  |
|                                                                                                                           |  |                      |  |                                 |  | Meter Run                            |  |
|                                                                                                                           |  |                      |  |                                 |  | Taps                                 |  |

| 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        |                        |   |                 |                    |                         |             | 140                | 70          | 140                | 70                     |             |
| 1.        | 2                      | x | .375            | 30                 |                         | 70          |                    |             | 80                 | 70                     | 3 hrs       |
| 2.        |                        |   |                 |                    |                         |             |                    |             |                    |                        |             |
| 3.        |                        |   |                 |                    |                         |             |                    |             |                    |                        |             |
| 4.        |                        |   |                 |                    |                         |             |                    |             |                    |                        |             |
| 5.        |                        |   |                 |                    |                         |             |                    |             |                    |                        |             |

| RATE OF FLOW CALCULATIONS |                          |                  |                            |                          |                       |                                              |                         |
|---------------------------|--------------------------|------------------|----------------------------|--------------------------|-----------------------|----------------------------------------------|-------------------------|
| NO.                       | COEFFICIENT<br>(24 HOUR) | $\sqrt{h_w P_a}$ | Pressure<br>P <sub>a</sub> | Flow Temp.<br>Factor Ft. | Gravity Factor<br>Fg. | Super Compress.<br>Factor, F <sub>pv</sub> . | Rate of Flow<br>Q, Mcfd |
| 1.                        | 2.591                    |                  | 42                         | .99                      | 1.3                   | 1                                            | 140                     |
| 2.                        |                          |                  |                            |                          |                       |                                              |                         |
| 3.                        |                          |                  |                            |                          |                       |                                              |                         |
| 4.                        |                          |                  |                            |                          |                       |                                              |                         |
| 5.                        |                          |                  |                            |                          |                       |                                              |                         |

| NO. | P <sub>r</sub> | Temp. °R | T <sub>r</sub> | Z     | Gas Liquid Hydrocarbon Ratio          | Mcf/bbl.          |
|-----|----------------|----------|----------------|-------|---------------------------------------|-------------------|
| 1.  |                |          |                | .9981 | A.P. L Gravity of Liquid Hydrocarbons | Deg               |
| 2.  |                |          |                |       | Specific Gravity Separator Gas        | XXXXXXXXXX        |
| 3.  |                |          |                |       | Specific Gravity Flowing Fluid        | XXXXXX            |
| 4.  |                |          |                |       | Critical Pressure                     | P.S.I.A. P.S.I.A. |
| 5.  |                |          |                |       | Critical Temperature                  | R R               |

| P <sub>c</sub> 152 | P <sub>c</sub> <sup>2</sup> 23,104 |                |                             |                                                           |                                        |                                                           |  |
|--------------------|------------------------------------|----------------|-----------------------------|-----------------------------------------------------------|----------------------------------------|-----------------------------------------------------------|--|
| NO.                | P <sub>c</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) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.6$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.47$ |  |
| 1.                 | 1764                               | 92             | 8464                        | 14,640                                                    |                                        |                                                           |  |
| 2.                 |                                    |                |                             |                                                           |                                        |                                                           |  |
| 3.                 |                                    |                |                             |                                                           |                                        |                                                           |  |
| 4.                 |                                    |                |                             |                                                           |                                        |                                                           |  |
| 5.                 |                                    |                |                             |                                                           |                                        |                                                           |  |

AOF = Q

$$\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 206$$

|                    |     |              |                  |              |
|--------------------|-----|--------------|------------------|--------------|
| Absolute Open Flow | 206 | Mcf @ 15.025 | Angle of Slope @ | Slope, n .85 |
|--------------------|-----|--------------|------------------|--------------|

Remarks:

|                      |                               |                                |             |
|----------------------|-------------------------------|--------------------------------|-------------|
| Approved By Division | Conducted By:<br>J. Alexander | Calculated By:<br>J. Alexander | Checked By: |
|----------------------|-------------------------------|--------------------------------|-------------|