

NEW 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>7-13-77 |                               |                                                       |                             |
| Company<br>Dugan Production Corp.                                                                                         |             |                         |                   | Connection                           |                      |                               |                                                       |                             |
| Pool<br>Undesignated PC                                                                                                   |             |                         |                   | Formation<br>Pictured Cliffs         |                      |                               |                                                       | Unit                        |
| Completion Date<br>6-30-77                                                                                                |             | Total Depth<br>1960'    |                   | Plug Back TD<br>1932'                |                      | Elevation<br>6709' GR         |                                                       | Farm or Lease Name<br>Chaco |
| Csg. Size<br>2-7/8"                                                                                                       | Wt.<br>6.4# | d                       | Set At<br>1965'   | Perforations:<br>From 1861' To 1868' |                      |                               | Well No.<br>2                                         |                             |
| Tbg. Size<br>1-1/4"                                                                                                       | Wt.<br>2.3# | d<br>1.380              | Set At<br>1839'   | Perforations:<br>From Open End To    |                      |                               | Unit    Sec.    Twp.    Rge.<br>0    6    24N    -28W |                             |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single - Gas                                                   |             |                         |                   |                                      | Packer Set At        |                               | County<br>San Juan                                    |                             |
| Producing Thru<br>Tubing                                                                                                  |             | Reservoir Temp. °F<br>a |                   | Mean Annual Temp. °F                 |                      | Baro. Press. - P <sub>a</sub> |                                                       | State<br>New Mexico         |
| L                                                                                                                         | H           | Gg<br>.62 est           | % CO <sub>2</sub> | % N <sub>2</sub>                     | % H <sub>2</sub> S   | Prover                        | Meter Run                                             | 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        |                  |   |              |                 |                      |             | 550             |             | 550             |                  | 7 days   |
| 1.        |                  |   |              |                 |                      |             |                 |             |                 |                  |          |
| 2.        |                  |   |              |                 |                      |             |                 |             |                 |                  |          |
| 3.        | 1/2" Pos Choke   |   |              | 6               |                      | 66°         |                 |             | 410             |                  | 3 hrs    |
| 4.        |                  |   |              |                 |                      |             |                 |             |                 |                  |          |
| 5.        |                  |   |              |                 |                      |             |                 |             |                 |                  |          |

  

| RATE OF FLOW CALCULATIONS |                       |                  |                         |                                  |                               |                                         |                      |
|---------------------------|-----------------------|------------------|-------------------------|----------------------------------|-------------------------------|-----------------------------------------|----------------------|
| NO.                       | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure P <sub>m</sub> | Flow Temp. Factor F <sub>t</sub> | Gravity Factor F <sub>g</sub> | Super Compress. Factor, F <sub>pv</sub> | Rate of Flow Q, Mcfd |
| 1                         |                       |                  |                         |                                  |                               |                                         |                      |
| 2                         |                       |                  |                         |                                  |                               |                                         |                      |
| 3                         | 5.4315                |                  | 18                      | .9943                            | .9837                         | 1.000                                   | 96                   |
| 4                         |                       |                  |                         |                                  |                               |                                         |                      |
| 5                         |                       |                  |                         |                                  |                               |                                         |                      |

  

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

  

| 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) $\frac{P_c^2}{P_c^2 - P_w^2} =$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$ |
|-----|-----------------------------|----------------|-----------------------------|-----------------------------------------------------------|-------------------------------------|------------------------------------------------------|
| 1   |                             |                |                             |                                                           |                                     |                                                      |
| 2   |                             |                |                             |                                                           |                                     |                                                      |
| 3   |                             | 422            | 178,084                     | 137,760                                                   | 2.2927                              | 2.0244                                               |
| 4   |                             |                |                             |                                                           |                                     |                                                      |
| 5   |                             |                |                             |                                                           |                                     |                                                      |

  

ACF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 194$

  

|                    |     |              |                         |              |
|--------------------|-----|--------------|-------------------------|--------------|
| Absolute Open Flow | 194 | Mcf @ 15.025 | Angle of Slope $\theta$ | Slope, n .85 |
|--------------------|-----|--------------|-------------------------|--------------|

  

Remarks: \_\_\_\_\_

  

|                         |                       |                          |             |
|-------------------------|-----------------------|--------------------------|-------------|
| Approved By Commission: | Conducted By:<br>Hall | Calculated By:<br>Jacobs | Checked By: |
|-------------------------|-----------------------|--------------------------|-------------|