

NEW MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLForm 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>10-12-75 |                               |                                                       |                                 |
| Company<br>Dugan Production Corp.                                                                                         |             |                         |                   | Connection                           |                       |                               |                                                       |                                 |
| Pool<br>WAW - Pictured Cliffs                                                                                             |             |                         |                   | Formation<br>Pictured Cliffs         |                       |                               |                                                       | Unit                            |
| Completion Date<br>10-1-75                                                                                                |             | Total Depth<br>1400'    |                   | Plug Back TD<br>1354'                |                       | Elevation<br>6149' GR         |                                                       | Farm or Lease Name<br>Ojo-He-He |
| Csg. Size<br>2-7/8"                                                                                                       | Wt.<br>6.5# | d                       | Set At<br>1384'   | Perforations:<br>From 1292' To 1328' |                       |                               | Well No.<br>3                                         |                                 |
| Tbg. Size<br>None                                                                                                         | Wt.         | d                       | Set At            | Perforations:<br>From To             |                       |                               | Unit    Sec.    Twp.    Rge.<br>L    33    27N    13W |                                 |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single - Gas                                                   |             |                         |                   |                                      | Packer Set At         |                               | County<br>San Juan                                    |                                 |
| Producing Thru<br>Csg                                                                                                     |             | Reservoir Temp. °F<br>@ |                   | Mean Annual Temp. °F                 |                       | Baro. Press. - P <sub>a</sub> |                                                       | State<br>New Mexico             |
| L                                                                                                                         | H           | G <sub>g</sub><br>.62   | % 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        |                  |   |              |                 |                      |          |                 |          | 140             |          | 7 days           |
| 1.        |                  |   |              |                 |                      |          |                 |          |                 |          |                  |
| 2.        |                  |   |              |                 |                      |          |                 |          |                 |          |                  |
| 3.        | 1/4" Pos Choke   |   |              | 1.5             |                      | 66°      |                 |          | 1.5             |          | 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 Ft. | Gravity Factor F <sub>g</sub> | Super Compress. Factor, F <sub>pv</sub> | Rate of Flow Q, Mcfd |
| 1                         |                       |                  |                         |                       |                               |                                         |                      |
| 2                         |                       |                  |                         |                       |                               |                                         |                      |
| 3                         | 1.3309                |                  | 13.5                    | .9943                 | .9837                         | 1.000                                   | 17.5                 |
| 4                         |                       |                  |                         |                       |                               |                                         |                      |
| 5                         |                       |                  |                         |                       |                               |                                         |                      |

  

|     |                |          |                |   |                                                      |
|-----|----------------|----------|----------------|---|------------------------------------------------------|
| NO. | P <sub>r</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                 |

  

|                    |                                    |                             |
|--------------------|------------------------------------|-----------------------------|
| P <sub>c</sub> 152 | P <sub>c</sub> <sup>2</sup> 23,104 |                             |
| NO.                | P <sub>t</sub> <sup>2</sup>        | P <sub>w</sub> <sup>2</sup> |
| 1                  |                                    |                             |
| 2                  |                                    |                             |
| 3                  | 13.5                               | 182                         |
| 4                  |                                    |                             |
| 5                  |                                    |                             |

(1)  $\frac{P_c^2}{P_c^2 - P_w^2} = 1.00$

(2)  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^{n \cdot 85} = 1.0000$

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 17.5$

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|                    |      |               |                  |          |     |
|--------------------|------|---------------|------------------|----------|-----|
| Absolute Open Flow | 17.5 | Mcfd @ 15.025 | Angle of Slope @ | Slope, n | .85 |
| Remarks:           |      |               |                  |          |     |

  

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