

**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><b>10-8-73</b>                  |  |
| Company<br><b>Tenneco Oil Co.</b>                                                                                         |  |                                |  | Connection                                       |  |                                              |  |
| Pool<br><b>Basin Dakota</b>                                                                                               |  |                                |  | Formation<br><b>Dakota</b>                       |  | Unit                                         |  |
| Completion Date                                                                                                           |  | Total Depth<br><b>5884</b>     |  | Plug Back TD                                     |  | Elevation<br><b>6271 GL</b>                  |  |
| Farm or Lease Name<br><b>Gallegos</b>                                                                                     |  | Well No.<br><b>5</b>           |  | Perforations:<br>From <b>5838</b> To <b>5868</b> |  | Unit Sec. Twp. Rge.<br><b>32 26 11</b>       |  |
| Csg. Size<br><b>5 1/2</b>                                                                                                 |  | Set At<br><b>5710</b>          |  | Perforations:<br>From To                         |  | County<br><b>San Juan</b>                    |  |
| Tbg. Size<br><b>2 7/8</b>                                                                                                 |  | Set At<br><b>5710</b>          |  | Perforations:<br>From To                         |  | State<br><b>New Mexico</b>                   |  |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br><b>Single Gas</b>                                              |  |                                |  |                                                  |  | Packer Set At                                |  |
| Producing Thru<br><b>Tbg</b>                                                                                              |  | Reservoir Temp. °F<br><b>8</b> |  | Mean Annual Temp. °F                             |  | Baro. Press. - P <sub>a</sub><br><b>12.0</b> |  |
| L                                                                                                                         |  | H                              |  | G <sub>g</sub>                                   |  | % CO <sub>2</sub>                            |  |
|                                                                                                                           |  |                                |  |                                                  |  | % N <sub>2</sub>                             |  |
|                                                                                                                           |  |                                |  |                                                  |  | % H <sub>2</sub> S                           |  |
|                                                                                                                           |  |                                |  |                                                  |  | Prover<br><b>X</b>                           |  |
|                                                                                                                           |  |                                |  |                                                  |  | 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        |                  |   |              |                 |                      |          | 1786            |          | 1824            |          | 70               |
| 1.        | 2                | X | 3/4          |                 |                      |          | 531             | 60       | 841             |          | 3 hrs.           |
| 2.        |                  |   |              |                 |                      |          |                 |          |                 |          |                  |
| 3.        |                  |   |              |                 |                      |          |                 |          |                 |          |                  |
| 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 Fg | Super Compress. Factor, F <sub>pv</sub> | Rate of Flow Q, Mcfd |
| 1                         | 12.3650               |                  | 543                     | 1.000                 | .9608             | 1.054                                   | 6800                 |
| 2.                        |                       |                  |                         |                       |                   |                                         |                      |
| 3.                        |                       |                  |                         |                       |                   |                                         |                      |
| 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                 |

|                                                                       |                             |                |                             |                                                           |
|-----------------------------------------------------------------------|-----------------------------|----------------|-----------------------------|-----------------------------------------------------------|
| P <sub>c</sub> <b>1836</b> P <sub>c</sub> <sup>2</sup> <b>3370896</b> |                             |                |                             |                                                           |
| 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                                                                     |                             | 853            | 727609                      | 2643287                                                   |
| 2                                                                     |                             |                |                             |                                                           |
| 3                                                                     |                             |                |                             |                                                           |
| 4                                                                     |                             |                |                             |                                                           |
| 5                                                                     |                             |                |                             |                                                           |

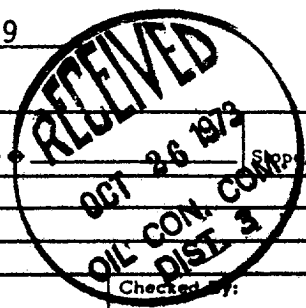
(1)  $\frac{P_c^2}{P_c^2 - P_w^2} = 1.2753$

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 8159$

(2)  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.999$

|                                                                                                       |                          |
|-------------------------------------------------------------------------------------------------------|--------------------------|
| Absolute Open Flow <b>8159</b> Mcfd @ 15.025                                                          | Angle of Slope <b>75</b> |
| Remarks:                                                                                              |                          |
| Approved By Commission: _____ Conducted By: <b>Tefteller, Inc.</b> Calculated By: <b>N. Tefteller</b> |                          |



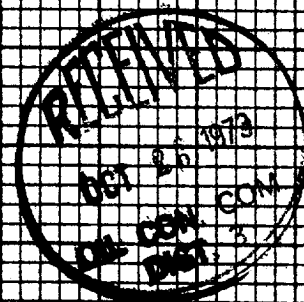
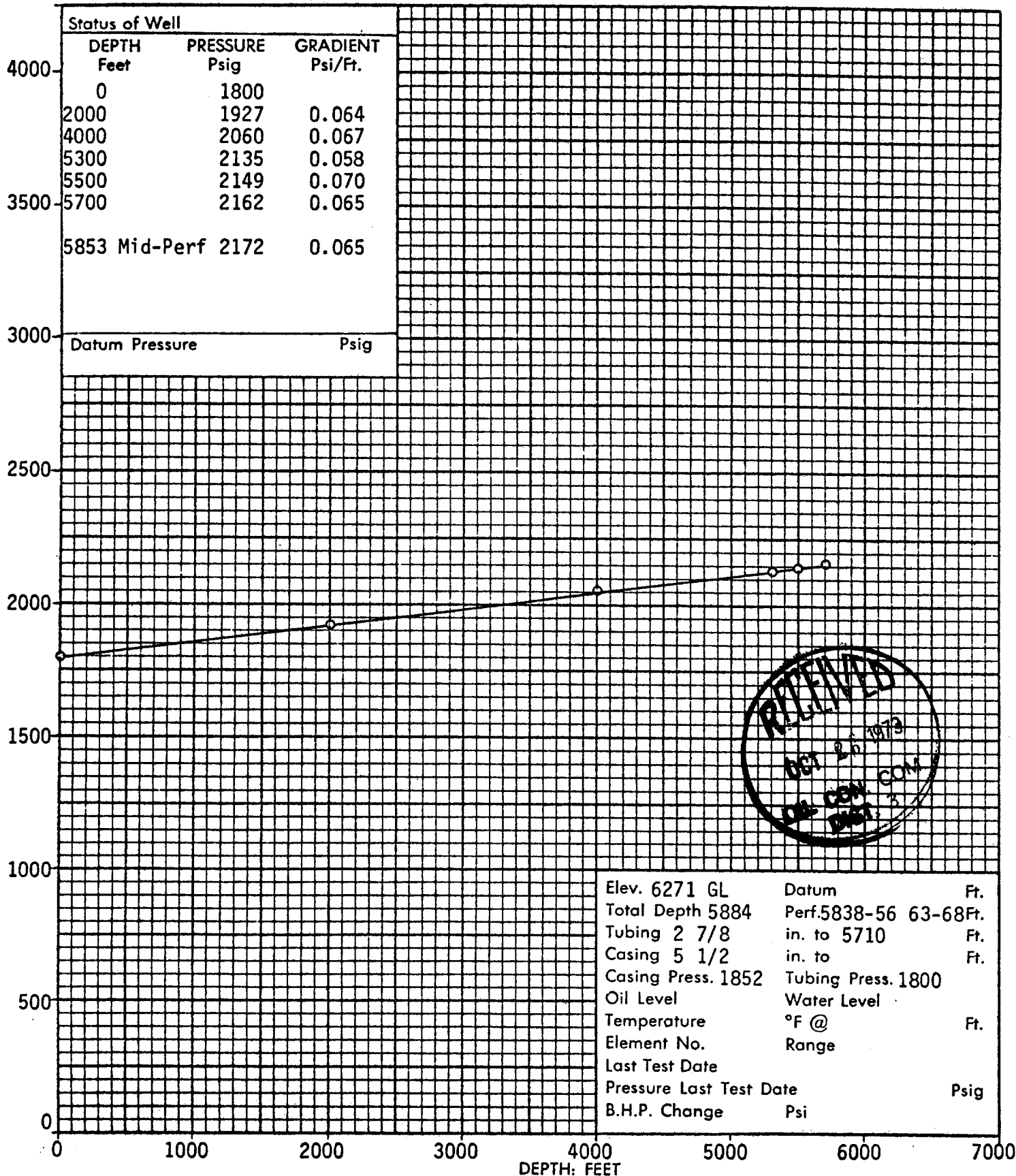
**EFTELLER, INC.**reservoir engineering data  
MIDLAND, TEXASPage 5 of 6  
File 1A-5283-AOFCompany TENNECO OIL CO. Lease GALLEGOS Well No. 5  
Field BASIN DAKOTA County SAN JUAN State NEW MEXICO  
Formation DAKOTA Test Date OCTOBER 5, 1973

## Status of Well

| DEPTH<br>Feet | PRESSURE<br>Psig | GRADIENT<br>Psi/Ft. |
|---------------|------------------|---------------------|
| 0             | 1800             |                     |
| 2000          | 1927             | 0.064               |
| 4000          | 2060             | 0.067               |
| 5300          | 2135             | 0.058               |
| 5500          | 2149             | 0.070               |
| 5700          | 2162             | 0.065               |
| 5853 Mid-Perf | 2172             | 0.065               |

Datum Pressure Psig

PRESSURE POUNDS PER SQUARE INCH GAUGE



|                         |                    |           |
|-------------------------|--------------------|-----------|
| Elev. 6271 GL           | Datum              | Ft.       |
| Total Depth 5884        | Perf. 5838-56      | 63-68 Ft. |
| Tubing 2 7/8            | in. to 5710        | Ft.       |
| Casing 5 1/2            | in. to             | Ft.       |
| Casing Press. 1852      | Tubing Press. 1800 |           |
| Oil Level               | Water Level        |           |
| Temperature             | °F @               | Ft.       |
| Element No.             | Range              |           |
| Last Test Date          |                    |           |
| Pressure Last Test Date |                    | Psig      |
| B.H.P. Change           | Psi                |           |