

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS

**RECEIVED**  
JUL 26 1984  
OIL CONSERVATION  
DIST. 3

|                                                                                                                           |                               |                                            |                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------|----------------------------------------------------------------------------------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                               | Test Date<br>6-26-84                       |                                                                                  |
| Company<br>Consolidated Oil & Gas, Inc.                                                                                   |                               | Connection<br>Southern Union Gathering Co. |                                                                                  |
| Pool<br>Flora Vista Gallup                                                                                                |                               | Formation<br>Gallup                        |                                                                                  |
| Completion Date<br>5-29-84                                                                                                |                               | Total Depth<br>6680                        | Plug Back TD<br>6646                                                             |
|                                                                                                                           |                               | Elevation<br>5645 GL                       | Form or Lease Name<br>Payne                                                      |
| Csg. Size<br>5 1/2                                                                                                        | Wt.<br>17 & 15.5#             | d<br>4.950                                 | Set At<br>6680                                                                   |
| Perforations:<br>From 5562 To 5834                                                                                        | Well No.<br>3-E               |                                            |                                                                                  |
| Tbg. Size<br>2 1/16                                                                                                       | Wt.<br>3.25#                  | d<br>1.751                                 | Set At<br>5668                                                                   |
| Perforations:<br>From To                                                                                                  | Unit Sec. Twp. R.<br>26 31 13 |                                            |                                                                                  |
| Type Well - Single - Drdhead - G.G. or G.O. Multiple<br>G - 0                                                             |                               | Packer Set At<br>5935                      | County<br>San Juan                                                               |
| Producing Thru<br>Tbg.                                                                                                    | Reservoir Temp. °F<br>n       | Mean Annual Temp. °F                       | Baro. Press. - P <sub>a</sub><br>State<br>New Mexico                             |
| L                                                                                                                         | H                             | G <sub>g</sub><br>.650 est.                | % CO <sub>2</sub> % N <sub>2</sub> % H <sub>2</sub> S<br>Prover<br>6" pos. choke |

| 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 |                  |
| 1.        | 2"x6"x3/4"       |   | pos. choke   |                 |                      |          | 928             |          | 928             |          |                  |
| 2.        |                  |   |              |                 |                      |          | 23              | 60       | 252             | 60       | 3 hrs.           |
| 3.        |                  |   |              |                 |                      |          |                 |          |                 |          |                  |
| 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>sp</sub> | Rate of Flow Q, Mscf |
|-----|-----------------------|------------------|-------------------------|----------------------------------|-------------------------------|----------------------------------------|----------------------|
| 1   | 11                    |                  | 35                      | 1.000                            | 1.24                          | 1.000                                  | 477.4                |
| 2   |                       |                  |                         |                                  |                               |                                        |                      |
| 3   |                       |                  |                         |                                  |                               |                                        |                      |
| 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 | Det             |
| 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.        |
| 5   |                |          |                |   | Critical Temperature                  | R               |

| P <sub>c</sub> 940 | P <sub>c</sub> <sup>2</sup> 883600 |                             |                             |                                                           |                                                             |
|--------------------|------------------------------------|-----------------------------|-----------------------------|-----------------------------------------------------------|-------------------------------------------------------------|
| NO.                | P <sub>r</sub> <sup>2</sup>        | P <sub>w</sub> <sup>2</sup> | P <sub>w</sub> <sup>2</sup> | P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> |                                                             |
| 1                  |                                    |                             |                             |                                                           | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0856$                  |
| 2                  | 264                                | 69696                       | 813904                      |                                                           | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0635$ |
| 3                  |                                    |                             |                             |                                                           |                                                             |
| 4                  |                                    |                             |                             |                                                           |                                                             |
| 5                  |                                    |                             |                             |                                                           |                                                             |

$$AOF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 507.7$$

Absolute Open Flow 507.7 Mscf @ 15.025 Angle of Slope 53.13 Slope, n 0.75

Remarks:

Approved By Division

Conducted By:  
Rick Baird

Calculated By:  
Rick Baird

Checked By:

