

RECEIVED

|                                                                                                                           |  |                                   |  |                                |  |                                       |  |
|---------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------|--|--------------------------------|--|---------------------------------------|--|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |  |                                   |  | Test Date<br>4-14-77           |  | APR 26 1977                           |  |
| Company<br>Oil Corp.<br>GULF ENERGY SERVICES                                                                              |  |                                   |  | Connection<br>AIR              |  | Unit<br>O.C.C.<br>ARTERIA, OFFICE     |  |
| Pool<br>WILDCAT                                                                                                           |  |                                   |  | Formation<br>Morrow            |  | Unit<br>ARTERIA, OFFICE               |  |
| Completion Date<br>4-14-77                                                                                                |  | Total Depth<br>13165<br>42145     |  | Plug Back TD<br>11896<br>11096 |  | Elevation<br>3629 Gr.                 |  |
| Casing Size<br>7.00"                                                                                                      |  | Wt.<br>26.00#                     |  | Set At<br>7.386"               |  | Perforations:<br>From 11567 To 11735  |  |
| Tubing Size<br>2.375EU                                                                                                    |  | Wt.<br>4.70#                      |  | Set At<br>1.995"               |  | Perforations:<br>From To              |  |
| Type Well - Single - Bradenhead - G.C. or G.O. Multiple<br>Dual Completion Gas-Gas                                        |  |                                   |  | Packer Set At<br>11510         |  | County<br>EDDY                        |  |
| Producing Thru<br>Tubing                                                                                                  |  | Reservoir Temp. °F<br>185 @ 11651 |  | Mean Annual Temp. °F<br>60     |  | Baro. Press. - P <sub>a</sub><br>13.2 |  |
| L<br>11651                                                                                                                |  | H<br>11651                        |  | G <sub>g</sub><br>0.666        |  | % CO <sub>2</sub><br>0.01             |  |
|                                                                                                                           |  |                                   |  | % N <sub>2</sub><br>0.00       |  | % H <sub>2</sub> S<br>0.00            |  |
|                                                                                                                           |  |                                   |  | Prover                         |  | Meter Run<br>X                        |  |
|                                                                                                                           |  |                                   |  |                                |  | Taps<br>FLG.                          |  |

| 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>hw | Temp.<br>°F | Press.<br>p.s.i.g. | Temp.<br>°F | Press.<br>p.s.i.g. |                        | Temp.<br>°F |
| SI        |                        |   |                 |                    |             |             | 3252               | 70          |                    |                        |             |
| 1.        | 4.00                   |   | 2.00            | 630                | 9.00"       | 97          | 3351               | 70          |                    |                        | 1.00 Hr.    |
| 2.        | 4.00                   |   | 2.00            | 630                | 17.00"      | 99          | 3255               | 70          |                    |                        | 1.00 Hr.    |
| 3.        | 4.00                   |   | 2.00            | 630                | 43.00"      | 94          | 3011               | 70          |                    |                        | 1.00 Hr.    |
| 4.        | 4.00                   |   | 2.00            | 630                | 85.00"      | 81          | 2640               | 70          |                    |                        | 1.00 Hr.    |
| 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, Mscf |
| 1.                        | 19.81                 | 76.034           | 643.20                  | 0.9662                | 1.2254                        | 1.0550                                  | 1883                 |
| 2.                        | 19.81                 | 104.568          | 643.20                  | 0.9645                | 1.2254                        | 1.0540                                  | 2580                 |
| 3.                        | 19.81                 | 166.306          | 643.20                  | 0.9688                | 1.2254                        | 1.0550                                  | 4126                 |
| 4.                        | 19.81                 | 233.820          | 643.20                  | 0.9804                | 1.2254                        | 1.0610                                  | 5904                 |
| 5.                        |                       |                  |                         |                       |                               |                                         |                      |

| NO. | P <sub>r</sub> | Temp. °R | T <sub>r</sub> | Z     | Gas Liquid Hydrocarbon Ratio | Mcf/bbl.        |
|-----|----------------|----------|----------------|-------|------------------------------|-----------------|
| 1.  | 0.96           | 557      | 1.47           | 0.894 | 49875                        |                 |
| 2.  | 0.96           | 559      | 1.48           | 0.894 | 51.50                        |                 |
| 3.  | 0.96           | 554      | 1.47           | 0.894 | 0.694                        | X X X X X X X X |
| 4.  | 0.96           | 541      | 1.43           | 0.880 | X X X X X                    | 0.754           |
| 5.  |                |          |                |       | 669                          | 667 P.S.I.A.    |
|     |                |          |                |       | 388                          | 411 R           |

| P <sub>r</sub> 3565.2 |                             | P <sub>c</sub> 12711 |                             |
|-----------------------|-----------------------------|----------------------|-----------------------------|
| NO.                   | P <sub>r</sub> <sup>2</sup> | P <sub>w</sub>       | P <sub>w</sub> <sup>2</sup> |
| 1.                    |                             | 3395.0               | 11526                       |
| 2.                    |                             | 3311.1               | 10963                       |
| 3.                    |                             | 3136.6               | 9838                        |
| 4.                    |                             | 2882.5               | 8309                        |
| 5.                    |                             |                      |                             |

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.88752 \quad (2) \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.5237$$

$$AOF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 14900$$

|                    |       |               |                  |       |                           |
|--------------------|-------|---------------|------------------|-------|---------------------------|
| Absolute Open Flow | 14900 | Mscf @ 15.025 | Angle of Slope @ | 48.88 | Slope, Q <sub>0.873</sub> |
|--------------------|-------|---------------|------------------|-------|---------------------------|

Remarks:

Approved by Commission: \_\_\_\_\_ Conducted By: *Jerry Davis* Calculated By: *Jerry Davis* Checked By: *R. M. Magall*