

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS

|                                                                                                                                      |             |                                             |                   |                                           |                       |                                     |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------------------------|-------------------|-------------------------------------------|-----------------------|-------------------------------------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input checked="" type="checkbox"/> Special |             |                                             |                   |                                           | Test Date<br>6-8-82   |                                     |
| Company<br>Amoco Production Company                                                                                                  |             |                                             |                   | Connection<br>El Paso Natural Gas Company |                       |                                     |
| Pool<br>Basin                                                                                                                        |             |                                             |                   | Formation<br>Dakota                       |                       |                                     |
| Completion Date<br>4-30-82                                                                                                           |             | Total Depth<br>6615                         |                   | Plug Back TD<br>6573                      |                       |                                     |
| Elevation<br>5636 GL                                                                                                                 |             | Farm or Lease Name<br>Lefkovitz Gas Com "B" |                   |                                           |                       |                                     |
| Coq. Size<br>5.500                                                                                                                   | Wt.<br>17   | d<br>4.892                                  | Set At<br>6615    | Perforations:<br>From 6360 To 6439        |                       | Well No.<br>1E                      |
| Tqg. Size<br>2.063                                                                                                                   | Wt.<br>3.25 | d<br>1.751                                  | Set At<br>6437    | Perforations:<br>From open To ended       |                       | Unit Soc. Twp. Rge.<br>P 25 29N 10W |
| Type Well - Single - Drordenhead - G.G. or G.O. Multiple<br>Dual                                                                     |             |                                             |                   |                                           | Packer Set At<br>4668 |                                     |
| Producing Thru<br>Tubing                                                                                                             |             | Reservoir Temp. °F<br>8                     |                   | Mean Annual Temp. °F                      |                       | County<br>San Juan                  |
| Baro. Press. - P <sub>a</sub>                                                                                                        |             | State<br>New Mexico                         |                   |                                           |                       |                                     |
| L                                                                                                                                    | H           | Gg                                          | % 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        | 14 Days          |   |              |                 |                      |          | 1067            |          | X               |          |                  |
| 1.        | 2.375            |   | .750         |                 |                      |          | 82              |          | X               |          | 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, Fpv | Rate of Flow Q, Mcfd |
| 1                         | 12.365                |                  | 94                      | 1.000                 | .9258             | 1.010                       | 1087                 |
| 2.                        |                       |                  |                         |                       |                   |                             |                      |
| 3.                        |                       |                  |                         |                       |                   |                             |                      |
| 4.                        |                       |                  |                         |                       |                   |                             |                      |
| 5.                        |                       |                  |                         |                       |                   |                             |                      |

  

|     |                |          |                |   |                                                      |
|-----|----------------|----------|----------------|---|------------------------------------------------------|
| NO. | R <sub>t</sub> | Temp. °R | T <sub>f</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) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0606$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0451$ |
| 1   |                             | 258            | 66564                       | 1097677                                                   |                                            |                                                             |
| 2   |                             |                |                             |                                                           |                                            |                                                             |
| 3   |                             |                |                             |                                                           |                                            |                                                             |
| 4   |                             |                |                             |                                                           |                                            |                                                             |
| 5   |                             |                |                             |                                                           |                                            |                                                             |

  

|                                       |  |  |  |                        |  |              |  |
|---------------------------------------|--|--|--|------------------------|--|--------------|--|
| Absolute Open Flow 1136 Mcfd @ 15.025 |  |  |  | Angle of Slope θ _____ |  | Slope, n .75 |  |
| Remarks: _____                        |  |  |  |                        |  |              |  |

  

|                      |                                |                                 |                 |
|----------------------|--------------------------------|---------------------------------|-----------------|
| Approved By Division | Conducted By:<br>J. J. Barnett | Calculated By:<br>J. J. Barnett | Checked By:<br> |
|----------------------|--------------------------------|---------------------------------|-----------------|