

## WELL DELIVERABILITY TEST REPORT FOR 19 70

Form C122-A  
Revised 1-1-66

|                           |                              |                        |                     |
|---------------------------|------------------------------|------------------------|---------------------|
| POOL NAME<br><b>Aztec</b> | POOL SLOPE<br>n = <b>.85</b> | FORMATION<br><b>PC</b> | COUNTY<br><b>SJ</b> |
|---------------------------|------------------------------|------------------------|---------------------|

|                                                            |                                      |                                                |                                                 |                                      |                                          |
|------------------------------------------------------------|--------------------------------------|------------------------------------------------|-------------------------------------------------|--------------------------------------|------------------------------------------|
| COMPANY<br><b>El Paso Natural Gas Co.</b>                  |                                      |                                                | WELL NAME AND NUMBER<br><b>Forrest No. 1</b>    |                                      |                                          |
| UNIT LETTER<br><b>E</b>                                    | SECTION<br><b>35</b>                 | TOWNSHIP<br><b>30</b>                          | RANGE<br><b>11</b>                              | PURCHASING PIPELINE<br><b>EPNG</b>   |                                          |
| CASING O.D. - INCHES<br><b>7.000</b>                       | CASING I.D. - INCHES<br><b>6.456</b> | SET AT DEPTH - FEET<br><b>2209</b>             | TUBING O.D. - INCHES<br><b>2.375</b>            | TUBING I.D. - INCHES<br><b>1.995</b> | TOP - TUBING PERF. - FEET<br><b>2260</b> |
| GAS PAY ZONE<br>FROM <b>2215</b> TO <b>2356</b>            |                                      | WELL PRODUCING THRU<br>CASING <b>XX</b> TUBING |                                                 | GAS GRAVITY<br><b>.651</b>           | GRAVITY X LENGTH<br><b>1442</b>          |
| DATE OF FLOW TEST<br>FROM <b>1-10-70</b> TO <b>1-18-70</b> |                                      |                                                | DATE SHUT-IN PRESSURE MEASURED<br><b>4-1-68</b> |                                      |                                          |

## PRESSURE DATA - ALL PRESSURES IN PSIA

| (a) Flowing Casing Pressure (DWt)  | (b) Flowing Tubing Pressure (DWt)      | (c) Flowing Meter Pressure (DWt)  | (d) Flow Chart Static Reading     | (e) Meter Error (Item c - Item d)      | (f) Friction Loss (a-c) or (b-c)             | (g) Average Meter Pressure (Integr.)                         |
|------------------------------------|----------------------------------------|-----------------------------------|-----------------------------------|----------------------------------------|----------------------------------------------|--------------------------------------------------------------|
| -                                  | -                                      | -                                 | -                                 | 0                                      | 0                                            | 205                                                          |
| (h) Corrected Meter Pressure (g+e) | (i) Avg. Wellhead Press. $P_t = (h+f)$ | (j) Shut-in Casing Pressure (DWt) | (k) Shut-in Tubing Pressure (DWt) | (l) $P_c$ = higher value of (j) or (k) | (m) Del. Pressure $P_d = \frac{80}{241} P_c$ | (n) Separator or Dehydrator Pr. (DWt) for critical flow only |
| 205                                | 205                                    | 301                               | 162                               | 301                                    | 241                                          |                                                              |

## FLOW RATE CORRECTION (METER ERROR)

| Integrated Volume - MCF/D | Quotient of $\frac{\text{Item c}}{\text{Item d}}$ | $\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ | Corrected Volume |
|---------------------------|---------------------------------------------------|----------------------------------------------|------------------|
| 65                        | 1.0000                                            | 1.0000                                       | Q = 65 MCF/D     |

## WORKING PRESSURE CALCULATION

| $(1-e^{-s})$  | $(F_c Q_m)^2 (1000)$ | $R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$ | $P_t^2$ | $P_w^2 = P_t^2 + R^2$ | $P_w = \sqrt{P_w^2}$ |
|---------------|----------------------|---------------------------------------|---------|-----------------------|----------------------|
| Friction Neg. |                      |                                       |         | Use $P_t^2$           | 205                  |

## DELIVERABILITY CALCULATION

$$D = Q \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{65}{\left[ \frac{32520}{48576} \right]^n} = \frac{.6694}{.7110} = 46 \text{ MCF/D}$$

## REMARKS:

OWWO Turned back on production 12-9-69.

## SUMMARY

Item h 205 Psia  
 P<sub>c</sub> 301 Psia  
 Q 65 MCF/D  
 P<sub>w</sub> 205 Psia  
 P<sub>d</sub> 241 Psia  
 D 46 MCF/D

Company El Paso Natural Gas Co.By D. E. Stauffer

Title \_\_\_\_\_

Witnessed By \_\_\_\_\_

Company \_\_\_\_\_

