

|                    |                       |                     |                      |
|--------------------|-----------------------|---------------------|----------------------|
| POOL NAME<br>Basin | POOL SLOPE<br>n = .75 | FORMATION<br>Dakota | COUNTY<br>Rio Arriba |
|--------------------|-----------------------|---------------------|----------------------|

|                                             |                               |                                         |                                                            |                                            |                                   |
|---------------------------------------------|-------------------------------|-----------------------------------------|------------------------------------------------------------|--------------------------------------------|-----------------------------------|
| COMPANY<br>El Paso Natural Gas              |                               |                                         | WELL NAME AND NUMBER<br>San Juan 29-6 Unit No. 4 P. No. 94 |                                            |                                   |
| UNIT LETTER<br>M                            | SECTION<br>16                 | TOWNSHIP<br>29                          | RANGE<br>6                                                 | PURCHASING PIPELINE<br>El Paso Natural Gas |                                   |
| CASING O.D. - INCHES<br>4.500               | CASING I.D. - INCHES<br>4.000 | SET AT DEPTH - FEET<br>7800             | TUBING O.D. - INCHES<br>2.375                              | TUBING I.D. - INCHES<br>1.995              | TOP - TUBING PERF. - FEET<br>7724 |
| GAS PAY ZONE<br>FROM 7682 TO 7772           |                               | WELL PRODUCING THRU<br>CASING TUBING XX |                                                            | GAS GRAVITY<br>.596                        | GRAVITY X LENGTH<br>4604          |
| DATE OF FLOW TEST<br>FROM 2-25-69 TO 3-5-69 |                               |                                         | DATE SHUT-IN PRESSURE MEASURED<br>5-20-68                  |                                            |                                   |

## 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                                               | 463                                                          |
| (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 (i) or (k) | (m) Del. Pressure $P_d = \frac{50}{430} \% P_c$ | (n) Separator or Dehydrator Pr. (DWt) for critical flow only |
| 463                                | 463                                    | 859                               | 786                               | 859                                    |                                                 |                                                              |

## 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 |
| 101                       | 1.0000                                            | 1.0000                                       | Q = 101 MCF/D    |

## WORKING PRESSURE CALCULATION

|                               |                      |                                       |         |                                      |                             |
|-------------------------------|----------------------|---------------------------------------|---------|--------------------------------------|-----------------------------|
| $(1-e^{-s})$<br>Friction Neg. | $(F_c Q_m)^2 (1000)$ | $R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$ | $P_t^2$ | $P_w^2 = P_t^2 + R^2$<br>Use $P_t^2$ | $P_w = \sqrt{P_w^2}$<br>463 |
|-------------------------------|----------------------|---------------------------------------|---------|--------------------------------------|-----------------------------|

## DELIVERABILITY CALCULATION

|                                                                |     |                                            |                             |                       |           |
|----------------------------------------------------------------|-----|--------------------------------------------|-----------------------------|-----------------------|-----------|
| $D = Q \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n =$ | 101 | $\left[ \frac{552981}{523512} \right]^n =$ | $\left( 1.0562 \right)^n =$ | $\frac{1.01419}{1} =$ | 105 MCF/D |
|----------------------------------------------------------------|-----|--------------------------------------------|-----------------------------|-----------------------|-----------|

REMARKS:

Installed Stopcock 2-6-69

## SUMMARY

|        |     |       |
|--------|-----|-------|
| Item h | 463 | Psia  |
| $P_c$  | 859 | Psia  |
| Q      | 101 | MCF/D |
| $P_w$  | 463 | Psia  |
| $P_d$  | 430 | Psia  |
| D      | 105 | MCF/D |

## CORRECTED COPY

Company El Paso Natural Gas Company  
By *H. E. McAnally* H. E. McAnally  
Title Well Test Engineer  
Witnessed By \_\_\_\_\_  
Company \_\_\_\_\_



all

