

Int. Deliverability

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL DELIVERABILITY TEST REPORT FOR 19 69

Form C122-A  
Revised 1-1-68

|                         |                       |                              |                    |
|-------------------------|-----------------------|------------------------------|--------------------|
| POOL NAME<br>So. Blanco | POOL SLOPE<br>n = .85 | FORMATION<br>Pictured Cliffs | COUNTY<br>San Juan |
|-------------------------|-----------------------|------------------------------|--------------------|

75-921

|                                              |                               |                                         |                                            |                                            |                           |
|----------------------------------------------|-------------------------------|-----------------------------------------|--------------------------------------------|--------------------------------------------|---------------------------|
| COMPANY<br>El Paso Natural Gas Co.           |                               |                                         | WELL NAME AND NUMBER<br>Tapp No. 6         |                                            |                           |
| UNIT LETTER<br>A                             | SECTION<br>22                 | TOWNSHIP<br>28                          | RANGE<br>8                                 | PURCHASING PIPELINE<br>El Paso Natural Gas |                           |
| CASING O.D. - INCHES<br>2.875                | CASING I.D. - INCHES<br>2.441 | SET AT DEPTH - FEET<br>2964             | TUBING O.D. - INCHES<br>No tubing          | TUBING I.D. - INCHES                       | TOP - TUBING PERF. - FEET |
| GAS PAY ZONE<br>FROM 2841 TO 2866            |                               | WELL PRODUCING THRU<br>CASING XX TUBING |                                            | GAS GRAVITY<br>.677                        | GRAVITY X LENGTH<br>1924  |
| DATE OF FLOW TEST<br>FROM 1-19-69 TO 1-27-69 |                               |                                         | DATE SHUT-IN PRESSURE MEASURED<br>11-12-68 |                                            |                           |

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                                               | 449                                                          |
| (h) Corrected Meter Pressure (g+e) | (i) Avg. Wellhead Press. $P_f = (h+f)$ | (j) Shut-in Casing Pressure (DWt) | (k) Shut-in Tubing Pressure (DWt) | (l) $P_c$ = higher value of (j) or (k) | (m) Del. Pressure $P_d = \frac{80}{842} \% P_c$ | (n) Separator or Dehydrator Pr. (DWt) for critical flow only |
| 449                                | 449                                    | 1053                              |                                   | 1053                                   |                                                 |                                                              |

FLOW RATE CORRECTION (METER ERROR)

|                                  |                                                             |                                                        |                                   |
|----------------------------------|-------------------------------------------------------------|--------------------------------------------------------|-----------------------------------|
| Integrated Volume - MCF/D<br>817 | Quotient of $\frac{\text{Item c}}{\text{Item d}}$<br>1.0000 | $\sqrt{\frac{\text{Item c}}{\text{Item d}}}$<br>1.0000 | Corrected Volume<br>Q = 817 MCF/D |
|----------------------------------|-------------------------------------------------------------|--------------------------------------------------------|-----------------------------------|

WORKING PRESSURE CALCULATION

|                      |                               |                                               |                   |                                 |                             |
|----------------------|-------------------------------|-----------------------------------------------|-------------------|---------------------------------|-----------------------------|
| $(1-e^{-s})$<br>.131 | $(F_c Q_m)^2 (1000)$<br>20566 | $R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$<br>2694 | $P_i^2$<br>201601 | $P_w^2 = P_i^2 + R^2$<br>204295 | $P_w = \sqrt{P_w^2}$<br>452 |
|----------------------|-------------------------------|-----------------------------------------------|-------------------|---------------------------------|-----------------------------|

DELIVERABILITY CALCULATION

$$D = Q \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{817}{\left( \frac{399845}{904514} \right)^n} = \left( \frac{.4420}{.4997} \right)^n = 408 \text{ MCF/D}$$

REMARKS:

New well first delivered 12-20-68

SUMMARY

Item h 449 Psia  
P<sub>c</sub> 1053 Psia  
Q 817 MCF/D  
P<sub>w</sub> 452 Psia  
P<sub>d</sub> 842 Psia  
D 408 MCF/D

Company EL PASO NATURAL GAS COMPANY  
By J. P. Kendrick  
Title Regional Well Test Engineer  
Witnessed By  
Company

FEB 3 1969

OIL CON. COM.  
DIST. 3