

**NEW MEXICO OIL CONSERVATION COMMISSION**  
**INITIAL WELL DELIVERABILITY TEST REPORT FOR 19 66**

Form C122-A  
 Revised 1-1-66

|                                  |                             |                                    |                           |
|----------------------------------|-----------------------------|------------------------------------|---------------------------|
| POOL NAME<br><b>Undesignated</b> | POOL SLOPE<br>n = <b>85</b> | FORMATION<br><b>Pictured Cliff</b> | COUNTY<br><b>San Juan</b> |
|----------------------------------|-----------------------------|------------------------------------|---------------------------|

|   |                                      |   |  |   |                           |
|---|--------------------------------------|---|--|---|---------------------------|
| COMPANY<br><b>El Paso Natural Gas Company</b>               |                                      |   | WELL NAME AND NUMBER<br><b>75427 Hughes No. 16</b> |   |                           |
| UNIT LETTER<br><b>G</b>                                     | SECTION<br><b>21</b>                 | TOWNSHIP<br><b>29</b>                         | RANGE<br><b>8</b>                                  | PURCHASING PIPELINE<br><b>El Paso Natural Gas Company</b> |                           |
| CASING O.D. - INCHES<br><b>2.875</b>                        | CASING I.D. - INCHES<br><b>2.441</b> | SET AT DEPTH - FEET<br><b>3173</b>            | TUBING O.D. - INCHES<br><b>NONE</b>                | TUBING I.D. - INCHES                                      | TOP - TUBING PERF. - FEET |
| GAS PAY ZONE<br>FROM <b>3101</b> TO <b>3117</b>             |                                      | WELL PRODUCING THRU<br>CASING <b>X</b> TUBING |  | GAS GRAVITY<br><b>.637</b>                                | GRAVITY X LENGTH          |
| DATE OF FLOW TEST<br>FROM <b>10-9-66</b> TO <b>10-17-66</b> |                                      |   | DATE SHUT-IN PRESSURE MEASURED<br><b>7-22-66</b>   |   |                           |

**PRESSURE DATA - ALL PRESSURES IN PSIA**

|  |  |  |                                   |   |  |  |
|--|--|--|-----------------------------------|---|--|--|
| (a) Flowing Casing Pressure (DWt)<br><b>476</b>    | (b) Flowing Tubing Pressure (DWt)<br><b>476</b>        | (c) Flowing Meter Pressure (DWt)<br><b>1000</b>  | (d) Flow Chart Static Reading     | (e) Meter Error (Item c - Item d)<br><b>1000</b>      | (f) Friction Loss (a - c) or (b - c)                         | (g) Average Meter Pressure (Integr.)<br><b>476</b>           |
| (h) Corrected Meter Pressure (g + e)<br><b>476</b> | (i) Avg. Wellhead Press. $P_t = (h + f)$<br><b>476</b> | (j) Shut-in Casing Pressure (DWt)<br><b>1000</b> | (k) Shut-in Tubing Pressure (DWt) | (l) $P_c$ = higher value of (j) or (k)<br><b>1000</b> | (m) Del. Pressure $P_d = \frac{80}{800} \% P_c$<br><b>80</b> | (n) Separator or Dehydrator Pr. (DWt) for critical flow only |

**FLOW RATE CORRECTION (METER ERROR)**

|   |  |   |  |
|---|--|---|--|
| Integrated Volume - MCF/D<br><b>170</b> | Quotient of $\frac{\text{Item c}}{\text{Item d}}$<br><b>1.0000</b> | $\sqrt{\frac{\text{Item c}}{\text{Item d}}}$<br><b>1.0000</b> | Corrected Volume<br>Q = <b>170</b> MCF/D |
|---|--|---|--|

**WORKING PRESSURE CALCULATION**

|                             |                      |   |         |                       |   |
|-----------------------------|----------------------|---|---------|-----------------------|---|
| $(1 - e^{-s})$              | $(F_c Q_m)^2 (1000)$ | $R^2 = (1 - e^{-s}) (F_c Q_m)^2 (1000)$ | $P_t^2$ | $P_w^2 = P_t^2 + R^2$ | $P_w = \sqrt{P_w^2}$<br><b>USE <math>P_t</math></b> |
| <b>FRICITION NEGLIGIBLE</b> |                      |   |         |                       |   |

**DELIVERABILITY CALCULATION**

|  |  |  |                                    |
|--|--|--|------------------------------------|
| $D = Q \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \underline{\underline{170}}$ | $\left[ \frac{360000}{773424} \right]^n = \underline{\underline{.4654}}$ | $\left[ \frac{.4654}{.5221} \right]^n = \underline{\underline{.5221}}$ | $\underline{\underline{89}}$ MCF/D |
|--|--|--|------------------------------------|

REMARKS:

**New Well First Delivered 9-23-66**

**SUMMARY**

Item h 476 Psia  
 P<sub>c</sub> 1000 Psia  
 Q 170 MCF/D  
 P<sub>w</sub> 476 Psia  
 P<sub>d</sub> 800 Psia  
 D 89 MCF/D

Company EL PASO NATURAL GAS COMPANY  
 By L. Kendrick  
 Title Regional Well Test Engineer  
 Witnessed By \_\_\_\_\_  
 Company \_\_\_\_\_

