

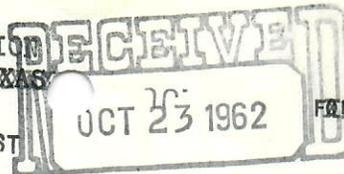


00636335

## COLORADO CONSERVATION COMMISSION

RAILROAD COMMISSION OF TEXAS

OIL AND GAS DIVISION

MULTI-POINT BACK PRESSURE TEST  
FOR GAS WELL

FORM GWT-10X

Company Horizon Oil & Gas Company Lease Nicodemus OIL & GAS  
 New Well X Retest CONSERVATION COMMISSION No. 1-6-UC  
 Field Unnamed-Waubensee Formation Date of Test July 16, 19 62  
 County Bacca Acres 640  
 Sec. 6 Blk. 34 S Sub. 42 W Loc. \_\_\_\_\_ Conn. None  
 Casing 2-7/8 Wt. 6.5 I.D. \_\_\_\_\_ Set at 3048 Perf. 2920 To 2928  
 Liner \_\_\_\_\_ Wt. \_\_\_\_\_ I.D. \_\_\_\_\_ Set at \_\_\_\_\_ Perf. \_\_\_\_\_ To \_\_\_\_\_  
 Tubing \_\_\_\_\_ Wt. \_\_\_\_\_ I.D. \_\_\_\_\_ Set at \_\_\_\_\_ Perf. \_\_\_\_\_ To \_\_\_\_\_  
 Gas Pay From 2920 To 2928 L 2924 G .770 GL 2251 Barometric 14.4  
 $e^s$  1.169  $F_d$  6.376 Well Shut In 72 Hours Before Test  
 Size of Prover 2" CFP Size of Meter Run \_\_\_\_\_ Type of Connection \_\_\_\_\_

REMARKS:

## OBSERVED DATA

| RUN NO. | SIZE METER RUN OR PROVER ORIFICE | METER PRESSURES |         |                           | FLOW TEMP | WELLHEAD |         | DURATION OF FLOW IN HOURS |
|---------|----------------------------------|-----------------|---------|---------------------------|-----------|----------|---------|---------------------------|
|         |                                  | STATIC Psig     | Pm Psia | DIFFERENTIAL Inches-Roots |           | WP Psig  | Pw Psia |                           |
| 1       | 3/32                             |                 |         |                           | 60        | 449.0    | 463.4   |                           |
| 2       | 1/8                              |                 |         |                           | 60        | 440.6    | 455.0   |                           |
| 3       | 3/16                             |                 |         |                           | 60        | 404.3    | 418.7   |                           |
| 4       | 7/32                             |                 |         |                           | 60        | 377.3    | 391.7   |                           |
| 5       |                                  |                 |         |                           |           |          |         |                           |

## FLOW CALCULATIONS

| RUN NO. | COEFF. "C" (24 HR.) | $h_w P_m$ | $\sqrt{h_w P_m}$ | WORKING PRESSURE ON PROVER |       | FLOW TEMP. FACTOR $F_{tf}$ | GRAVITY FACTOR $F_g$ | FLOW RATE $Q = M^2 cfd @ 14.65$ |
|---------|---------------------|-----------|------------------|----------------------------|-------|----------------------------|----------------------|---------------------------------|
|         |                     |           |                  | Psig                       | Psia  |                            |                      |                                 |
| 1       | .1863               |           |                  | 449.0                      | 463.4 | 1.000                      | .8827                | 76                              |
| 2       | .3499               |           |                  | 440.6                      | 455.0 | 1.000                      | .8827                | 140                             |
| 3       | .8035               |           |                  | 404.3                      | 418.7 | 1.000                      | .8827                | 297                             |
| 4       | 1.1090              |           |                  | 377.3                      | 391.7 | 1.000                      | .8827                | 383                             |
| 5       |                     |           |                  |                            |       |                            |                      |                                 |

S.I.P. 460.4 PsigBar. 14.4 $P_c$  474.8 PsiaPRESSURE CALCULATIONS  
(All Squared Pressures In Thousands)

$$P_c^2 \quad 225.44 \quad \times \quad e^s \quad 1.169 \quad = \quad P_f^2 \quad 263.54$$

| RUN NO. | $P_w^2$ | $e^s P_w^2$ | $F_d Q$ | $F^2$ | $R^2$ | $P_s^2$ | $P_f^2 - P_s^2$ |
|---------|---------|-------------|---------|-------|-------|---------|-----------------|
| 1       | 214.74  | 251.03      | .48     | .24   | .04   | 251.07  | 12.47           |
| 2       | 207.03  | 242.02      | .89     | .80   | .14   | 242.16  | 21.38           |
| 3       | 175.31  | 204.94      | 1.89    | 3.43  | .58   | 205.52  | 58.02           |
| 4       | 153.43  | 179.36      | 2.44    | 5.62  | .95   | 180.31  | 83.23           |
| 5       |         |             |         |       |       |         |                 |

Slope of Curve:  $n =$  .740Angle of Curve:  $\theta =$  53.5Absolute Open Flow: 910 MCF/Day

R. R. COMMISSION:

Company: J. S. Shumard

Pipe Line: \_\_\_\_\_

Others: \_\_\_\_\_

