MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS Revised 12-1-55

Pool Basin Dakota Formation Dakota County San Juan

| Init | nitial | | | Annual | | | | Special | | | | Date of Test9-13-63 | | | |
|---|--|---------------|--------------|------------------|---------------|------------------|-----------------------|---------------------------------|----------------------|---------------------------|--|--|------------------|---|--|
| Comp | any_ | 7Sou | | thern Unio | | a Product | | Co. ica/ Lease | | Nic | ckson | Well No | | 9 | |
| Unit | |) | _Sec | . <u>14</u> | Twn | 2 6 - | Mort | h Rg | e & West | Pu | rchaser | El Paso N | atural | Gas Company | |
| Casi | ng l | -1/2 | _Wt. | 10 | .50 I | .D. <u>.</u> | 1.052 | Se | t at 74 | 92 | Perf. 723 | 7 | To 74 | 844 | |
| Tubi | ng <u>1</u> - | -1/2 | Wt. | 2.9 | <u>0</u> 1. | .D | 1.61 | 0 _Se | t at 73 | 87 | Perf. 737 | 7 | To 738 | 7 | |
| Gas Pay: From 7237 To 7246 L 7377 xG .735 -GL 5164 Bar. Press. 12.0 | | | | | | | | | | | | | | | |
| Prod | ucin | g Thr | u: | Cas | ing | | | Tu | bing | X S | Type Weingle-Brade | ell Sin | gle Cas | 7.0. Dual | |
| Date | of (| Compl | etio | n: | 9-6-6 | 53 | | Packe | r | | Reserve | oir Temp. | | J.O. Dual | |
| | | | | | | | | | OBSERV | ED DAT. | A | | | | |
| Test | ed T | nroug | h <u>(</u> | | EE) (| Choke | e) # | | • | | | Type Tap | os | | |
| Flow Data Tubing Data Casing Data | | | | | | | | | | | | | T | | |
| $\overline{}$ | (Prover) | | | | | | ress. Diff | | Temp. | | Press. Temp. | | | Duration | |
| No. | (1 | Line) Size | | Orif | ice) | | | | o _F . | Į | g °F. | Press. | o _F . | of Flow Hr. | |
| - | |)12E | | - 51 | .26 | ps. | -8 | h _w | F • | | | | + | | |
| SI | | 9 | + | | Л. | 28 | _ | | 70 | 192h | | 1882 | - | 7 days | |
| 1. 2. | | | | | /4 | 20 | - | | 70- | 283 | 105 | 995 | | 3 hrs. | |
| <u>3</u> . | | | | | | † | | | | | | | | | |
| 4. | | | | | | | | | | | | | | | |
| 5. | | | | | | | $\perp L$ | | | | | <u> </u> | <u> </u> | | |
| | | | | | | | | | DT OUT OAT | CUTT A SET | ONE | | | | |
| - | | - 66: | <u> </u> | - 1 | | | Dance | | FLOW CAL | | | Compre | 200 | Rate of Flow | |
| No. | Ce | belli | clen | ient | | | | sure | | | Gravity | Compress. Factor | | | |
| NO. | (24-Hour) | | | $\sqrt{h_{w^l}}$ | | | אר | sia | | | | Fpv | | € 15.025 psia | |
| | · · | | | | | _ | | J | , | | Fg | | | | |
| 1. | 12.3650 | | | | | 295 | | .9905 | | .9035 | 1.035 33 | | 35/9 | | |
| 2 . 3. | | | | | | | | | | | | | | | |
| 4. | | | | | | | | | | | | | | | |
| 5. | | | | | - | | | | | | | | | | |
| ravi | PRESSURE CALCULATIONS as Liquid Hydrocarbon Ratio cf/bbl. Specific Gravity Separator Gas ravity of Liquid Hydrocarbons deg. Specific Gravity Flowing Fluid c (1-e^-8) P_c 1936 P_c 3748.1 | | | | | | | | | | | | | | |
| No. | P _w | | | Pt ² | | F _c Q | | (F _c Q) ² | (F | cQ) ² -e-s) | P _w 2 | P _c -P _w ² | l l | al. Pw Pw Pc | |
| 1. | | | | | | | 士 | | | | 1014.6 | 2734. | | .520 | |
| 1. 2. | | | I | | | | | | | | ļ | | | | |
| 3. 4. | | | | | | | | | | | | ļ | | | |
| <u>4.</u> 5. | | | + | | | | +- | | | | | | | | |
| | | | | | | | | | | | <u> </u> | | | | |
| | | | | _ | <u>k</u> s | | | | MCFPD; | n | <u>,75 </u> | | 125 | 'Ell A | |
| COMP | _ | | | | bion l | | | | | | | | / KLI. | | |
| ADDR | | 1 10 71 | <u>۳. 0</u> | Bo | er 000 | 9 | | PETOD | New Me | X160 | | | | | |
| WITN | | | | | Moana | | للاحد | <u>- 97.</u> | | • | | | SEP | 201963 | |
| | | | | | | | Zome e | MY . | | | | | OIL CO | PN. CCi. | |
| COMPANY El Pago Matural Gas Company CC: (3) New Maxico O.C.C. REMARKS DIS | | | | | | | | | | | | ST. 3 | | | |
| | (1) (1) (2) (1) | Mr. | Panlaso H. L | Clo | te ral G | ps Co ks, 1 | rape z P.O. | y - P Box 9 | roration 90 - Far | Dept. | , Box 1492, n, New Mex | , El Paso, lco | | * | |
| | \-/ | | - | | | | | | | | | | | | |

INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at . least three inch cycles.

NOMENCLATURE

- Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w) . MCF/da. @ 15.025 psia and 60° F.
- P_c 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater. psia
- PwT Static wellhead working pressure as determined at the end of flow period. (Casing if flowing thru tubing, tubing if flowing thru casing.) psia
- Pt Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia
- Pf Meter pressure, psia.
- hw Differential meter pressure, inches water.
- Fg Gravity correction factor.
- Ft Flowing temperature correction factor.
- Fpv Supercompressability factor.
- n _ Slope of back pressure curve.

Note: If $P_{\mathbf{w}}$ cannot be taken because of manner of completion or condition of well, then $P_{\mathbf{w}}$ must be calculated by adding the pressure drop due to friction within the flow string to $P_{\mathbf{t}}$.