NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

| Poo | 1 Tapacit | to PC Extr | 1 | Formation | Pictur | ed Cliff | 6 | County_ | Rio A | rriba | |
|---|--|--|------------------------------------|----------------|--|---------------------------------------|--|---------------------------------------|--|----------------|--|
| | | | | | | | | | | 4-12-57 | |
| Com | pany North | west Proc | duction C | erp. | Lease | "E" | | We: | ll No | 3-34 | |
| Company Northwest Production Gerp. Lease "E" Well No. 3-34 Unit N Sec. 34 Twp. 26N Rge. 3W Purchaser Not connected | | | | | | | | | | | |
| Casing 7-5/8 Wt. 26.4 I.D. Set at 4130 Perf. 3936 | | | | | | | | | _To | 3960 | |
| Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 5669 Perf. To_ | | | | | | | | | | | |
| Gas Pay: From 3936 To 3960 L 3936 xG .650 -GL 2558 Bar. Press. | | | | | | | | | | | |
| Producing Thru: Casing xx Tubing Type Well Dual - G-G Single-Bradenhead-G. G. or G.O. Dual | | | | | | | | | | | |
| Single-Bradenhead-G. G. or G.O. Dual Date of Completion: 3-25-57 Packer Yes - 5479 Reservoir Temp. | | | | | | | | | | | |
| OBSERVED DATA | | | | | | | | | | | |
| Tested Through (Choke) (Mettet)/ Type Taps | | | | | | | | | | | |
| | | Flow | v Data | | | Tubing | Data | Casing I |)ata | | |
| No | (Prover) (Line) | (Choke) | Press | • Diff. | Temp. | Press. | Temp. | Press. | Temp. | Duration | |
| _ | Size | Size | psig | h _w | ° _F . | psig | °F. | psig | ∘ _F . | of Flow Hr. | |
| SI | | | | | | 1125 | | 1040 | | SI | |
| 1. 2. | ······································ | 3/4 | | | | 1156 | | 79 | F.4 | | |
| 3. | | † ************************************ | | | | | | 13 | 56 | 3 hr | |
| 4. | | • | | | | | | | | | |
| 2. ! | | <u> </u> | | | | | | | | | |
| FLOW CALCULATIONS | | | | | | | | | | | |
| | Coefficient Press | | | ressure | re Flow Temp. Gravit | | | y Compress. Rate of Flow | | | |
| No. | | | | | Factor | | Factor | Facto | r | Q-MCFPD | |
| - | (24-nour) | | h _w p _f psia | | ractor F _t | | $egin{array}{ccc} 	ext{Factor} & 	ext{Factor} & 	ext{Fpv} \end{array}$ | | | @ 15.025 psia | |
| 1. 2. | 14.1605 | | 91 | | 1 0000 | | 0600 | 1 000 | | | |
| 3. 4. 5. | | | | | 1.0039 | | 9608 | 1.003 | | 1253 | |
| 4. | | | | | | | | | | | |
| <u>5. l</u> | · | | | | | | | | | | |
| PRESSURE CALCULATIONS as Liquid Hydrocarbon Ratiocf/bbl. Specific Gravity Separator Gas ravity of Liquid Hydrocarbonsdeg. Specific Gravity Flowing Fluid | | | | | | | | | | | |
| c | .651 (1-e ⁻⁵) .170 P _C 1052 | | | | | | | 1052 | P ² 1107 | | |
| | | | | | | | · | | | | |
| No. | P _w | Pt2 | F _c Q | $(F_cQ)^2$ | (Fc | Q) ² -e ^{-s}) | P _w 2 | $P_c^2 - P_w^2$ | Ca | : W | |
| 1. | · (hora) | | | | —————————————————————————————————————— | -e 3) | | · · · · · · · · · · · · · · · · · · · | P. | w Pc | |
| 2. | | | | | | | | | | | |
| 1. 2. 3. 4. | 91 | 8.3 | .82 | .67 | .11 | 8. | 4 | 1098.6 | | 1.0076 | |
| 5. | | | | | - | | | | | | |
| Absolute Potential: 1261 MCFPD; n_85 1.00648 | | | | | | | | | | | |
| COMPA | ANY | Pacifi | e Northw | est Pipel | ine Corr | poration | | | A STATE OF THE STA | | |
| ADDRI | ESS Cand TITLE | 4054 W | . Broadw | ay, Parmi | ngton, N | New Mexic | :0 | | | 7/20 | |
| | ESSED | | | Well Test | Enginee | er | | | lo. D | 4/11 | |
| COMPA | NY | | | ervation | Commissi | on | | | 1 | | |
| | | | | | REMA | | | | 0,0 | 1 0 01 | |
| COMPANY N. M. Oil Conservation Complesion REMARKS | | | | | | | | | | | |

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 \equiv 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
- P_w 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.
- F_{pv} Supercompressability factor.
- n I Slope of back pressure curve.

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