

3-M. M. O. C. C. Aztec
1-Bill Cutler
1-Fowler
1-File

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Formation Mesa Verde County San Juan
Initial xx Annual _____ Special _____ Date of Test 9-11-57
Company PACIFIC NORTHWEST PIPELINE Lease 32-8 Well No. 24-19
Unit A Sec. 19 Twp. 32N Rge. 8W Purchaser not connected
Casing 5-1/4" Wt. _____ I.D. _____ Set at 5930' Perf. 5368' To 5816'
Tubing 1-1/4" Wt. _____ I.D. _____ Set at 5817' Perf. _____ To _____
Gas Pay: From _____ To _____ L _____ xG .650 -GL _____ Bar.Press. 12
Producing Thru: Casing _____ Tubing xx Type Well single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: _____ Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through 11/11/57 (Choke) 11/11/57 Shut in 7 days Type Taps _____

| No. | Flow Data | | | | | Tubing Data | | Casing Data | | Duration of Flow Hr. |
|-----|----------------------------|------------------------------|----------------|-------------------------|--------------|----------------|--------------|----------------|--------------|----------------------|
| | (Prover) (Line) Size | (Choke) (Orifice) Size | Press. psig | Diff. h _w | Temp. °F. | Press. psig | Temp. °F. | Press. psig | Temp. °F. | |
| SI | | | | | | 600 | | 1138 | | |
| 1. | | 3/4" | 73 | | 54° | 73 | 54° | 715 | | 3 hours |
| 2. | | | | | | | | | | |
| 3. | | | | | | | | | | |
| 4. | | | | | | | | | | |
| 5. | | | | | | | | | | |

FLOW CALCULATIONS

| No. | Coefficient (24-Hour) | $\sqrt{h_w p_f}$ | Pressure psia | Flow Temp. Factor F _t | Gravity Factor F _g | Compress. Factor F _{pv} | Rate of Flow Q-MCFPD @ 15.025 psia |
|-----|--------------------------|------------------|------------------|--|-------------------------------------|--|--|
| 1. | 14.1605 | | 85 | 1.0058 | .9608 | 1.000 | 1163 |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
P_c _____ (1-e^{-s})
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1150 P_c² 1322.5

| No. | P _w P _t (psia) | P _t ² | F _c Q | (F _c Q) ² | (F _c Q) ² (1-e ^{-s}) | $\frac{727}{P_w^2}$ | P _c ² -P _w ² | Cal. P _w | $\frac{P_w}{P_c}$ |
|-----|---|-----------------------------|------------------|---------------------------------|---|---------------------|--|------------------------|-------------------|
| 1. | | | | | | 528.5 | 794.0 | | 1.67 |
| 2. | | | | | | | | | |
| 3. | | | | | | | | | |
| 4. | | | | | | | | | |
| 5. | | | | | | | | | |

Absolute Potential: 1708 MCFPD; n .75/ 1.4689
COMPANY PACIFIC NORTHWEST PIPELINE CORPORATION
ADDRESS 405 1/2 West Broadway, Farmington, New Mexico
AGENT and TITLE C. R. Wagner - Well Test Engineer
WITNESSED _____
COMPANY _____

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 = 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
- P_t = Flowing wellhead pressure (tubing if flowing through tubing, casing if
flowing through casing.) psia
- P_f = Meter pressure, psia.
- h_w = Differential meter pressure, inches water.
- F_g = Gravity correction factor.
- F_t = Flowing temperature correction factor.
- F_{pv} = Supercompressability factor.
- n = Slope of back pressure curve.

Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t .

| CONSERVATION COMMISSION | | |
|------------------------------|-----|-------------------------------------|
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