

2-EPND

NEW MEXICO OIL CONSERVATION COMMISSION

1-W. G. Cutler

1-Northwest Production

1-Southern Union (Dallas, Texas)

1-File

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Form C-122

Revised 12-1-55

Pool Blanco Formation Mesa Verde County Rio ArribaInitial XX Annual _____ Special _____ Date of Test 5-4-59Company PACIFIC NORTHWEST PIPELINE Lease San Juan 29-7 Well No. 72-26Unit B Sec. 26 Twp. 29N Rge. 7W Purchaser not connectedCasing 5 1/2" Wt. 15.54 I.D. _____ Set at 5500' Perf. 4844' To 5456'Tubing 1-1/4" Wt. 2.44 I.D. _____ Set at 5455' Perf. _____ To _____Gas Pay: From 4844' To 5456' L _____ xG .650 -GL _____ Bar.Press. _____Producing Thru: Casing XXX Tubing _____ Type Well _____Date of Completion: 4-22-59 Packer _____ Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp. _____

OBSERVED DATA

Tested Through (XXXXXX) (Choke) (XXXXXX) 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 | | | | | | <u>1044</u> | | <u>1112</u> | | |
| 1. | | <u>3/4"</u> | <u>678</u> | | <u>700</u> | <u>696</u> | | <u>678</u> | | <u>3 hours</u> |
| 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. | <u>12.3650</u> | | <u>690</u> | <u>.9905</u> | <u>.9608</u> | <u>1.068</u> | <u>8672</u> |
| 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 1124 P_c 1263.4

| No. | P _w P _t (psia) | P _t ² | F _c Q | (F _c Q) ² | (F _c Q) ² (1-e ^{-s}) | <u>708</u> P _w ² | P _c ² -P _w ² | Cal. P _w | P _w / P _c |
|-----|---|-----------------------------|------------------|---------------------------------|---|---|--|------------------------|------------------------------------|
| 1. | | | | | | <u>501.3</u> | <u>762.1</u> | | <u>1.66</u> |
| 2. | | | | | | | | | |
| 3. | | | | | | | | | |
| 4. | | | | | | | | | |
| 5. | | | | | | | | | |

Absolute Potential: 12,682 MCFPD; n 1.4624COMPANY PACIFIC NORTHWEST PIPELINE CORPORATIONADDRESS 418 1/2 West Broadway, Farmington, New MexicoAGENT and TITLE C. R. Wagner, Well Test EngineerWITNESSED Jesse B. GoodwinCOMPANY El Paso Natural Gas Company, Farmington, New Mexico

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 .

| OIL CONSERVATION COMMISSION | | |
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