

NM OCC-3
Peppin-1
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File-1

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool So Blanco PC Extn Formation Pictured Cliffs County Rio Arriba
Initial X Annual _____ Special _____ Date of Test 7-22-57
Company Northwest Production Corp. Lease "C" Well No. 5-8
Unit N Sec. 8 Twp. 25N Rge. 4W Purchaser Not connected
Casing 5 Wt. 11.5 I.D. _____ Set at 3935 Perf. 3758 To 3812
Tubing 1 1/2 Wt. 2.3 I.D. _____ Set at 3772 Perf. 3770 To _____
Gas Pay: From 3758 To 3812 L _____ xG .650 -GL _____ Bar.Press. _____
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual _____
Date of Completion: 7-12-57 Packer No Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) 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 | | | | | | 1005 | | 1005 | | SI |
| 1. | | | | | | | | | | |
| 2. | | 3/4" | | | | 122 | 47 | 730 | | 3 hours |
| 3. | | | | | | | | | | |
| 4. | | | | | | | | | | |
| 5. | | | | | | | | | | |

FLOW CALCULATIONS

| No. | Coefficient (24-Hour) | $\sqrt{h_{wpf}}$ | Pressure psia | Flow Temp. Factor F _t | Gravity Factor F _g | Compress. Factor F _{pv} | Rate of Flow Q-MCFPD @ 15.025 psia |
|-----|-----------------------|------------------|---------------|----------------------------------|-------------------------------|----------------------------------|------------------------------------|
| 1. | 12.3650 | | 134 | 1.0127 | 0.9608 | 1.013 | 1,633 |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1017 P_c 1034.3

| No. | $\frac{P_w}{P_t}$ (psia) | P _t ² | F _c Q | (F _c Q) ² | $\frac{(F_c Q)^2}{(1-e^{-s})}$ | P _w ² | P _c ² -P _w ² | Cal. P _w | $\frac{P_w}{P_c}$ |
|-----|--------------------------|-----------------------------|------------------|---------------------------------|--------------------------------|-----------------------------|--|---------------------|-------------------|
| 1. | | | | | | 550.6 | 483.7 | | 2.1383 |
| 2. | | | | | | | | | |
| 3. | | | | | | | | | |
| 4. | | | | | | | | | |
| 5. | | | | | | | | | |

Absolute Potential: 3,116 MCFPD; n .85/1.9079
COMPANY Pacific Northwest Pipeline Corp.
ADDRESS 405 1/2 W. 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 .

DRILLING DEPARTMENT

COMPANY Northwest Production Corp.

LEASE "C" WELL NO. 5-8

DATE OF TEST 7-22-57

SHUT IN PRESSURE (PSIG): TUBING 1005 CASING 1005 S. I. PERIOD 9 DAYS

SIZE BLOW NIPPLE 3/4 T-C - Choke

FLOW THROUGH Tubing WORKING PRESSURES FROM Casing

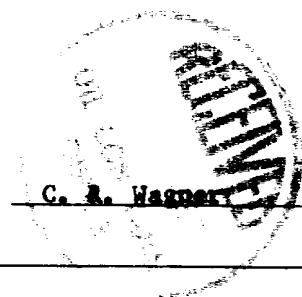
| TIME | | PRESSURE | Q (MCFD) 15.025 PSIA @ 60°F | WELLHEAD WORKING PRESSURE (PSIG) | TEMP |
|-------|---------|----------|--------------------------------|-------------------------------------|------|
| HOURS | MINUTES | | | | |
| | 34.5 | 168 | | 793 | 44 |
| | 41.5 | 168 | | 776 | 45 |
| | 50 | 141 | | 758 | 45 |
| 1 | 0 | 120 | | 785 | 46 |
| | 12 | 130 | | 773 | 45 |
| | 26.5 | 108 | | 770 | 47 |
| | 44 | 155 | | 751 | 46 |
| 2 | 5 | 161 | | 750 | 46 |
| | 30 | 107 | | 746 | 47 |
| 3 | 0 | 122 | | 730 | 47 |
| | | | | | |
| | | | | | |
| | | | | | |

START AT: 11:00 AM END TEST AT 2:00 PM

REMARKS: At 1 hr & 20 mins blew 2 slugs of H₂O. Continued rest of blow.

TESTED BY: C. A. Wagner

WITNESS: _____



OIL CONSERVATION COMMISSION

AZTEC DISTRICT OFFICE

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