3-NMOCC Aztec
1-Bill Cutler
1-Oliver Fowler
1-L. D. Galloway
1-File

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Wildcat Formation Pictured Cliffs County Rio Arriba

Initial X X Annual ____ Special ____ Date of Test 7/1/58

Company PACIFIC NORTHWEST PIPELINE Lease San Juan 27-5 Well No. 38-16

Unit G Sec. 16 Twp. 27N Rge. 5W Purchaser not connected

Casing 7-5/8" Wt. 23.0# I.D. ____ Set at 3688.6' Perf. 3430' To 3478'

Tubing 1½" Wt. 2.3# I.D. ____ Set at 3452' Perf. ____ To ____

Gas Pay: From ____ To ____ L ____ xG .650 -GL ____ Bar.Press. 12

Producing Thru: Casing x x x Tubing ____ Type Well DUAL
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: ____ Packer ____ Reservoir Temp. ____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Shut in 8 days Type Taps ____

No.	Flow Data (Prover) (Line) Size	Flow Data (Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						1069		1069		
1.		3/4	169	1	66°	193		169	66°	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.	12.3650		181	.9943	.9608	1.016	2172
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl. Specific Gravity Separator Gas ____
Gravity of Liquid Hydrocarbons ____ deg. Specific Gravity Flowing Fluid ____
P_c ____ $(1-e^{-s})$ ____ P_c 1081 P_c^2 1168.6

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	205 P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.						42.0	1126.6		1.04
2.									
3.									
4.									
5.									

Absolute Potential: 2,237 MCFPD; n .85/ 1.0298

COMPANY PACIFIC NORTHWEST PIPELINE CORPORATION
ADDRESS 4181 West Broadway, Farmington, New Mexico
AGENT and TITLE C. R. Wagner - Well Test Engineer
WITNESSED Bob Davis - Jr.-Engineer
COMPANY El Paso Natural Gas Company

REMARKS

Dual Completion with Mesa Verde

RECEIVED JULY 9 1958 OIL CON. COM. DIST. 3

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.