NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Formation Mesaverde County San Juan

Initial X Annual ____ Special ____ Date of Test 10/13/60

Company Aztec Oil and Gas Company Lease Decker Well No. 1

Unit L Sec. 14 Twp. 30N Rge. 12W Purchaser Southern Union Gathering System

Casing 4½ Wt. 9.50 I.D. 4.090 Set at 5850 Perf. 5098 To 5128

Tubing 2 3/8 Wt. 4.70 I.D. 1.995 Set at 5076 Perf. 5048 To 5098

Gas Pay: From 5098 To 5128 L 5048 xG 0.65 (est) GL 5681 Bar.Press. 12

Producing Thru: Casing ____ Tubing X Type Well Single

Date of Completion: 10/4/60 Packer X Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp. ____

OBSERVED DATA

Tested Through ~~(Casing)~~ (Choke) ~~(Meter)~~ 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						880		785		7 days
1.		0.750				132	65 (est)	340		3 hrs.
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.	12.365		144	1.0000	0.9608	1.014	1735
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 ____

F_c ____ $(1-e^{-s})$ ____ P_c 832 P_c^2 692224

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	352					123904	568320		
2.									
3.									
4.									
5.									

Absolute Potential: 8012 MCFPD; n 0.75

COMPANY Aztec Oil and Gas Company

ADDRESS Bruner # 570, Farmington, New Mexico

AGENT and TITLE ORIGINAL SIGNED BY L. M. STEVENS L. M. Stevens, Dist. Engr.

WITNESSED ____

COMPANY ____

REMARKS

OCT 13 1960

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.