ILLEGIBLE W MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Dakota County San Juan

Initial X Annual ___ Special ___ Date of Test 7/28/60

Company Aztec Oil & Gas Company Lease Nye Well No. 10-D

Unit O Sec. 12 Twp. 30N Rge. 13W Purchaser ___

Casing 4½ Wt 9.50 I.D. 4.090 Set at 7195 Perf. 6944 To 7103

Tubing 2 Wt. 4.7 I.D. 1.995 Set at 6989 Perf. Pin collared To ___

Gas Pay: From 6944 To 7103 L 6989 xG 0.65 -GL 4504 Bar.Press. 12

Producing Thru: Casing ___ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 7/21/60 Packer ___ Reservoir Temp. 158

OBSERVED DATA

Tested Through ~~(Prover)~~ (Choke) ~~(Meter)~~ Type Taps ___

No.	Flow Data (Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Temp. °F.	Casing Data Press. psig	Temp. °F.	Duration of Flow Hr.
SI						1975		1975		7 days
1.		0.750				118	60	367		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.	12.365		130	1.0000	0.9608	1.010	1502
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 1987 P_c^2 3,948,169

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2 (1-e^{-s})$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	379					143,641	3,804,528		
2.									
3.									
4.									
5.									

Absolute Potential: 1545 MCFPD; n 0.75
COMPANY Aztec Oil & Gas Company
ADDRESS Drawer # 570, Farmington, New Mexico
AGENT and TITLE ORIGINAL SIGNED BY L. M. STEVENS L. M. Stevens, Dist. Engr.
WITNESSED ___
COMPANY ___

REMARKS

RECEIVED
AUG 5 1960
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.