NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Fulcher Kutz Formation Pictured Cliffs County San Juan

Initial X Annual Special Date of Test 9/7/60

Company Aztec Oil & Gas Company Lease Banks Well No. 13-B

Unit A Sec. 12 Twp. 27N Rge. 10W Purchaser

Casing 2 7/8 Wt. 6.50 I.D. 2.441 Set at 2351 Perf. 2284 To 2308

Tubing Wt. I.D. Set at Perf. To

Gas Pay: From 2284 To 2308 L 2284 xG 0.65(Est.) -GL 1485 Bar.Press. 12

Producing Thru: Casing X Tubing Type Well Single (see remarks)
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 8/31/60 Packer 6487 * Reservoir Temp.

OBSERVED DATA

Tested Through ~~(Prover)~~ (Choke) ~~(Orifice)~~ Type Taps

No.	Flow Data (Prover) (Line) Size	Flow Data (Choke) (Orifice) Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						507		507		7 days
1.		0.750				154	60 (T)	278		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.	12.369		166	1.0000	0.9608	1.080	2012
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 519 P_c^2 269361

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.	490					240100	[illegible]		
2.									
3.									
4.									
5.									

Absolute Potential: 2765 MCFPD; n 0.85

COMPANY Aztec Oil & Gas Company
ADDRESS Drawer # 570, Farmington, New Mexico
AGENT and TITLE ORIGINAL SIGNED BY L. M. STEVENS L. M. Stevens, Dist. [illegible]
WITNESSED
COMPANY

REMARKS

* Two strings casing set in common hole. Communication between strings.

RECEIVED
SEP 12 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.