

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool South Blanco Formation Pictured Cliffs County San Juan
Initial K Annual _____ Special _____ Date of Test 10/3/60
Company Astec Oil & Gas Company Lease Arlacum-Flonville Well No. 3-A
Unit P Sec. 13 Twp. 23N Rge. 4W Purchaser _____
Casing 8 7/8 Wt. 6.70 I.D. 2.441 Set at 3497 Perf. 3523 To 3508
Tubing _____ Wt. _____ I.D. _____ Set at _____ Perf. _____ To _____
Gas Pay: From 3497 To 3523 L 3497 xG 0.700 -GL 2440 Bar.Press. 12
Producing Thru: Casing K Tubing _____ Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 9/23/60 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Pressure) (Choke) (Restrictor)

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								970		10 days
1.		0.750						147	60(B)	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.	11.365		159	1.0000	0.9608	1.017	1991
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 982 P_c 964.34

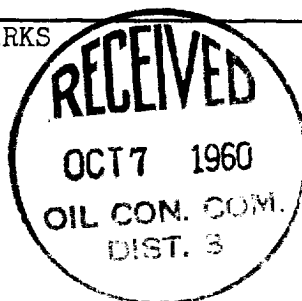
No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.	179	32041	10.663	113.700	10.513	32041	980.510		
2.									
3.									
4.									
5.									

Absolute Potential: 1999 MCFPD; n 0.85COMPANY Astec Oil & Gas CompanyADDRESS Box 4 570, Farmington, New MexicoAGENT and TITLE ORIGINAL SIGNED BY L. M. STEVENSL. M. Stevens, Dist. 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 .

STATE OF NEW MEXICO	
OIL CONSERVATION COMMISSION	
AZTEC DISTRICT OFFICE	
NUMBER OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
TRANSPORTER	
PRODUCTION OFFICE	
OPERATOR	