

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pocl South Blanco Formation Pictured Cliffs County San Juan
Initial 1 Annual _____ Special _____ Date of Test 5/2/60
Company Antero Oil & Gas Company Lease Whitney Well No. 3
Unit C Sec. 9 Twp. 27N Rge. 9W Purchaser _____
Casing 2 7/8 Wt. 6.5 I.D. 2.441 Set at 2298 Perf. 2299 To 2203
Tubing _____ Wt. _____ I.D. _____ Set at _____ Perf. _____ To _____
Gas Pay: From 2299 To 2203 L 2299 xG 0.65 -GL 14.8 Bar.Press. 12
Producing Thru: Casing 12 Tubing _____ Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 5/23/60 Packer 20 Reservoir Temp. _____

OBSERVED DATA

Tested Through (Pressure) (Choke) (Minimum) 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										
1.		<u>0.750</u>						<u>125</u>	<u>60</u>	<u>7 days</u>
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.	<u>10.365</u>		<u>198</u>	<u>1.010</u>	<u>0.988</u>	<u>1.080</u>	<u>2197</u>
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
 P_c _____ $(1-e^{-s})$ Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
 P_c 607 P_c^2 368.449

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	$\frac{P_w}{P_c}$
1.	<u>198</u>		<u>13.917</u>	<u>177.948</u>	<u>17.948</u>	<u>39204</u>	<u>368449 - 39204</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 7.7 MCFPD; n 0.85
COMPANY Antero Oil & Gas Company
ADDRESS Denver, CO 80202
AGENT and TITLE ORIGINAL SIGNED BY L. M. STEVENS L. M. STEVENS, M.E. 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 .

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