

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Pictured Cliffs County San Juan
Initial X Annual _____ Special _____ Date of Test August 27, 1957
Company Antec Oil & Gas Company Lease Greater Well No. 6
Unit K Sec. 20 Twp. 31N Rge. 11W Purchaser Southern Union Gas Company
Casing 7 5/8 Wt. 24 1/2 I.D. 7.025 Set at 4790 Perf. 2570 To 2606
Tubing 1" Wt. 1.70 I.D. 1.049 Set at 2600 Perf. 2630 To 2680
Gas Pay: From 2570 To 2606 L 2570 xG 0.65 -GL 1671 Bar.Press. 12psia
Producing Thru: Casing X Tubing _____ Type Well G.G. Dual
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: August 9, 1957 Packer Baker Model D Reservoir Temp. _____
Date Shut-in for Test August 20, 1957

OBSERVED DATA

Tested Through (Proven) (Choke) (Meter) 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						<u>783</u>	<u>60</u>	<u>783</u>	<u>60</u>	<u>7 days</u>
1.		<u>0.750</u>				<u>312</u>	<u>60</u>	<u>312</u>	<u>60</u>	<u>3 hours</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>12.3690</u>		<u>304</u>	<u>1.000</u>	<u>0.9608</u>	<u>1.037</u>	<u>3992</u>
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 795 P_c² 632.025

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.						<u>97.344</u>	<u>534.681</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 4601 MCFPD; n 0.85

COMPANY ANTEC OIL & GAS COMPANY
ADDRESS P.O. Box 706, Farmington, New Mexico
AGENT and TITLE ORIGINAL SIGNED BY L. M. STEVENS, District 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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