

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Angel Peak Formation Dakota County San
Initial X Annual _____ Special _____ Date of Test Mar
Company PUBCO PETROLEUM CORP. Lease State Well No. 35
Unit N Sec. 36 Twp. 29N Rge. 11W Purchaser El Paso Natural Gas Company
Casing 5 1/2 Wt. 17 I.D. 4.892 Set at 6545 Perf. 6356 To 6394
Tubing 2 3/8 Wt. 4.7 I.D. 1.995 Set at 6421 Perf. 6417 To 6361
Gas Pay: From 6356 To 6394 L 6375 xG 0.6500 -GL 4142.75 Bar.Press. 12.0
Producing Thru: Casing _____ Tubing X Type Well Single - gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: March 17, 1960 Packer No Reservoir Temp. 156° F

OBSERVED DATA

Tested Through (~~10000~~) (Choke) (~~10000~~) 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						2078		2078		
1.		0.750	335			335		882		
2.			255			255		761		
3.			251		90	251	90	702		3 hours
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.							
2.							
3.	12.3650		863	0.9723	0.9608	1.0250	3,114
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e⁻⁸)

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2090 P_c 4368

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ⁻⁸)	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w / P _c
1.						69.17	4298.83		0.126
2.									
3.									
4.									
5.									

Absolute Potential: 3,415 MCFPD; n 0.75

COMPANY PUBCO PETROLEUM CORP.
ADDRESS 108 West Chuska, Aztec, New Mexico
AGENT and TITLE B. H. Waychoff, Jr., Pet. Engr. *B. H. Waychoff*
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.

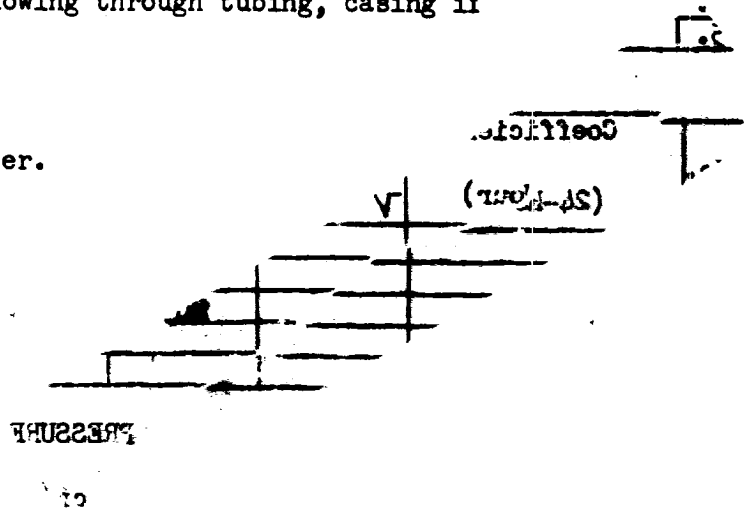
h_w = Differential meter pressure, inches water.

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 .

Well No.	3	
County		
Section	1	
Range	1	
Zone		
Operator		
Tester		
File	1	✓