

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Basin Dakota Formation Dakota County Rio Arriba  
Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 11-9-62  
Company Gaulkins Oil Company Lease Breesh "F" Well No. B-1  
Unit D Sec. 33 Twp. 27 N Rge. 6 W Purchaser Southern Union Gas Company  
Casing 4 1/2 Wt. 10.5 I.D. 4.00 Set at 7700 Perf. 7332 To 7552  
Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 7323 Perf. 7323 To \_\_\_\_\_  
Gas Pay: From 7332 To 7552 L 7323 xG .669 -GL 4823 Bar.Press. 12  
Producing Thru: Casing No Tubing Yes Type Well Single Gas  
Date of Completion: 10-27-62 Packer none Single-Bradenhead-G. G. or G.O. Dual  
Reservoir Temp. 180°

## OBSERVED DATA

Tested Through (Prover) (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 <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						2350		2300		
1.		3/4"				360		1190		
2.										
3.										
4.										
5.										

## FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 15.025 psia
1.	14.1405		372	1.0048	.9535	1.041	5254
2.							
3.							
4.							
5.							

## PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
F<sub>c</sub> \_\_\_\_\_ (1-e<sup>-s</sup>)

Specific Gravity Separator Gas \_\_\_\_\_  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> \_\_\_\_\_ P<sub>c</sub><sup>2</sup> \_\_\_\_\_

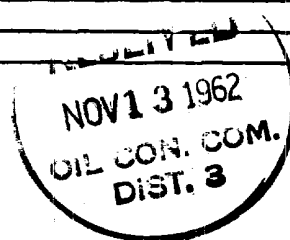
No.	P <sub>w</sub> P <sub>t</sub> (psia)	P <sub>t</sub> <sup>2</sup>	F <sub>c</sub> Q	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-s</sup> )	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup>	Cal. P <sub>w</sub>	P <sub>w</sub> /P <sub>c</sub>
1.						1,444,804	4,276,860		.503
2.									
3.									
4.									
5.									

Absolute Potential: 6543 MCFPD; n 1.2454COMPANY Gaulkins Oil CompanyADDRESS Box 720, Farmington, New MexicoAGENT and TITLE Frank Long Superintendent

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.

$F_{pv}$  = Supercompressibility 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  $P_t$ .