

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Jalmat Formation Yates-7-Rivers County Lea  
Initial \_\_\_\_\_ Annual \_\_\_\_\_ Special X Date of Test 3-24/4-1-60  
Company Producing Properties, Inc. Lease Dabbs Well No. 1  
Unit M Sec. 34 Twp. 25 Rge. 37 Purchaser El Paso Natural Gas Co.  
Casing 7" Wt. 24.0 I.D. 6.36 Set at 2546' Perf. Open To \_\_\_\_\_  
Tubing 2 3/8" Wt. 4.7 I.D. 1.99" Set at 2550' Perf. Open end To \_\_\_\_\_  
Gas Pay: From 2717 To 2785 L 2550 xG .666 -GL 1698 Bar.Press. 13.2  
Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well Single  
Date of Completion: 1/23/57 Packer 2460' Single-Bradenhead-G. G. or G.O. Dual  
Reservoir Temp. \_\_\_\_\_

## OBSERVED DATA

Tested Through \*\*\*\*\* (Prover) \*\*\*\*\* (Choke) (Meter)Type Taps Flange

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						534				72
1.	4	1.250	153	1.00	74	305				24
2.	4	1.250	209	1.96	67	287				24
3.	4	1.250	164	4.84	79	252				24
4.	4	1.250	160	8.41	64	235				24
5.										

## FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	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.	9.643	12.88	166.2	.9868	.9491	1.015	118.0
2.	9.643	20.87	222.2	.9933	.9491	1.021	193.6
3.	9.643	29.29	177.2	.9822	.9491	1.016	267.5
4.	9.643	38.17	173.2	.9962	.9491	1.017	353.9
5.							

## PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
P<sub>c</sub> 9.936 (1-e<sup>-s</sup>) 0.110

Specific Gravity Separator Gas \_\_\_\_\_  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> 547.2 P<sub>c</sub><sup>2</sup> 299.4

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.	318.2	101.2	1.172	1.37	0.15	101.4	198.0		
2.	300.2	90.1	1.924	3.70	0.41	90.5	208.9		
3.	265.2	70.3	2.658	7.06	0.78	71.1	228.3		
4.	248.2	61.6	3.516	12.36	1.36	63.0	236.4		
5.									

Absolute Potential: 440 MCFPD; n 1.000COMPANY Producing Properties, Inc.ADDRESS Box 955, Andrews, Texas.AGENT and TITLE Paul Gregory, Prod. Supt.WITNESSED Murray and Irwin

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  $P_t$ .