

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Wildcat Formation Dakota County San Juan  
Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 10-8-59  
Company Ray Kimball E.L. Campbell Lease Hanson Well No. 1  
Unit A Sec. 5 Twp. 25N Rge. 10W Purchaser El Paso Natural Gas Co.  
Casing 5 1/8 Wt. 15.5 I.D. 5.000 Set at 6502 Perf. 6372 To 6448  
Tubing 2 3/8 Wt. 4.7 I.D. 2.000 Set at 6436 Perf. Opened Ended To \_\_\_\_\_  
Gas Pay: From 6372 To 6448 L \_\_\_\_\_ xG \_\_\_\_\_ GL \_\_\_\_\_ Bar.Press. \_\_\_\_\_  
Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well Single-Bradenhead G.O. or G.O. Dual  
Date of Completion: 10-8-59 Packer \_\_\_\_\_ Reservoir Temp. \_\_\_\_\_

## OBSERVED DATA

Tested Through (Prover) XXXXX (Choke) XXXXX (Meter) XXXXX 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.	
1.						1625		1650		7 Days.
2.		.750	185		72	185		505		3 Hours.
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.							
2.	12.365		197	.9887	1.008	1.018	2,471
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> 1662 P<sub>c</sub><sup>2</sup> 2762244

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.									
2.						267289	2494955		
3.									
4.									
5.									

Absolute Potential: 2,669 MCFPD; n .75  
COMPANY Well Production Co.  
ADDRESS 1041 Zuni Drive Farmington, New Mexico  
AGENT and TITLE N.A. Neely Agent & Tester.  
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  $P_t$ .

OIL CONSERVATION COMMISSION		
AZTEC DISTRICT OFFICE		
No. Copies Received <u>3</u>		
DISTRIBUTION		
	NO. FURNISHED	
Operator	1	
Santa Fe	1	
Operation Office		
State Land Office		
U. S. G. S.		
Transporter		
File	1	✓