

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool BLANCO Formation PICTURED CLIFFS County RIO ARRIBA  
Initial x Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 12-9-57  
Company Western Drilling Company Lease Warren Federal Well No. 1  
Unit H Sec. 26 Twp. 25N Rge. 6W Purchaser El Paso Natural Gas Co.  
Casing 5-1/2 Wt. 15.5 # I.D. \_\_\_\_\_ Set at 2667 Perf. 2602 To 2622  
Tubing 1-1/4 Wt. 2.4 # I.D. \_\_\_\_\_ Set at 2615 Perf. 2605 To 2610  
Gas Pay: From 2598 To 2640 L \_\_\_\_\_ xG 0.680 Est. \_\_\_\_\_ GL \_\_\_\_\_ Bar.Press. \_\_\_\_\_  
Producing Thru: Casing x Tubing \_\_\_\_\_ Type Well Single Gas  
Date of Completion: 11-3-57 Packer \_\_\_\_\_ Single-Bradenhead-G. G. or G.O. Dual  
Reservoir Temp. \_\_\_\_\_

## OBSERVED DATA

Tested Through (~~Prover~~) (Choke) (~~Valve~~) 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						854		854		
1.		3/4	127		63	173		127		3 hours
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.	14.1605		139	0.9971	0.9393	1.016	1,873
2.							
3.							
4.							
5.							

## PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
P<sub>c</sub> \_\_\_\_\_ (1-e<sup>-s</sup>)  
Specific Gravity Separator Gas \_\_\_\_\_  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> 866 P<sub>c</sub> 749.956

No.	$\frac{P_w}{P_t}$ (psia)	P <sub>t</sub> <sup>2</sup>	F <sub>c</sub> Q	(F <sub>c</sub> Q) <sup>2</sup>	$\frac{(F_c Q)^2}{(1-e^{-s})}$	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>	$\frac{P_w}{P_c}$
1.						34,225	715,731		
2.									
3.									
4.									
5.									

Absolute Potential: 1,949 MCFPD; n 0.85

COMPANY Western Drilling Company  
ADDRESS 7114 Central S.E., Albuquerque, New Mexico  
AGENT and TITLE Virgil L. Stoabs, 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  $P_t$ .

LOG.	
FURNISHED	
LOG. NO.	
DATE	
WELL NO.	
WELL NAME	
WELL TYPE	
WELL STATUS	
WELL LOCATION	
WELL DEPTH	
WELL DIAMETER	
WELL PERFORATION	
WELL COMPLETION	
WELL EQUIPMENT	
WELL TEST DATA	
WELL TEST RESULTS	
WELL TEST COMMENTS	
WELL TEST SIGNATURE	
WELL TEST DATE	