

## 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 3/1/60

Company SOUTHWEST PRODUCTION COMPANY Lease Echary Fed Well No. 1

Unit L Sec. 34 Twp. 29N Rge. 10W Purchaser Southern Union Gas Company

Casing 5-1/2" Wt. 17# I.D. 4.892 Set at 6622 Perf. 6340 To 6524

Tubing 2-3/8" Wt. 4.70 I.D. 1.995 Set at 6514.22 Perf. \_\_\_\_\_ To 6514.22

Gas Pay: From 6340 To 6524 L 6514 xG 0.67 -GL 4364 Bar.Press. 0.12

Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well Single-Gas

Date of Completion: 2/15/60 Packer \_\_\_\_\_ Reservoir Temp. \_\_\_\_\_

## OBSERVED DATA

Tested Through (2031813) (Choke) (2030001) Type Taps \_\_\_\_\_

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.		<u>3/4</u>	<u>539</u>		<u>83°</u>	<u>2040</u>	<u>83°</u>	<u>2040</u>		<u>7 days</u>
2.						<u>539</u>		<u>1810</u>		<u>3 hour</u>
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.	<u>12.3650</u>		<u>531</u>	<u>0.9786</u>	<u>0.9463</u>	<u>1.215</u>	<u>6.592.9</u>
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> 2052 P<sub>c</sub><sup>2</sup> 4201.7

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.						<u>1493.3</u>	<u>2701.7</u>		<u>.596</u>
2.									
3.									
4.									
5.									

Absolute Potential: 9,164 MCFPD; n 0.75

COMPANY SOUTHWEST PRODUCTION COMPANY

ADDRESS (3108 Southland Center, Dallas, Texas) c/o Oil Reports Box 763 Hobbs, N.M.

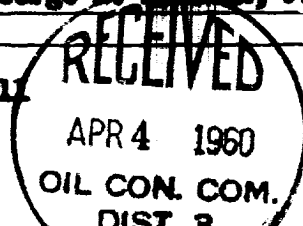
AGENT and TITLE Helen Smith, Agent

WITNESSED Tests taken by George L. [Signature], Fred Foreman

COMPANY \_\_\_\_\_

REMARKS

New Well



## 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  $P_t$ .

Well No.	1	
County	2	
Section	1	
Township		
Range		
U. S. G. S.		
Transect		
File	1	✓