

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Gavilan Formation Pictured Cliffs County Rio Arriba  
Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test January 19, 1962  
Company Socony Mobil Oil Co., Inc. Lease Jicarilla H Well No. H-10  
Unit L Sec. 11 Twp. 26N Rge. 3W Purchaser El Paso Natural Gas Co.  
Casing 2-7/8" Wt. \_\_\_\_\_ I.D. 2 1/8" Set at 3734 Perf. 3616 To 3694  
Tubing X Wt. \_\_\_\_\_ I.D. \_\_\_\_\_ Set at \_\_\_\_\_ Perf. \_\_\_\_\_ To \_\_\_\_\_  
Gas Pay: From 3616 To 3694 L 3553 xG .695 -GL 2469 Bar.Press. \_\_\_\_\_  
Producing Thru: Casing X Tubing \_\_\_\_\_ Type Well Gas (single)  
Date of Completion: 9/22/61 Packer None Single-Bradenhead-G. G. or G.O. Dual  
Reservoir Temp. \_\_\_\_\_

## OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)

Type Taps \_\_\_\_\_

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	<u>(Prover)</u> (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
1.	2"	3/4"	64		60			717		3
2.								64	60	
3.										
4.										
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.	12.3650		76	1.000	.9292	1.010	882
2.							
3.							
4.							
5.							

## PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
F<sub>c</sub> 5.551 (1-e<sup>-S</sup>) .164

Specific Gravity Separator Gas .695  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> 729 P<sub>c</sub><sup>2</sup> 531,441

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.	76	5,776	4,896	23,971	3,931	9,707	521,73	98.5	
2.									
3.									
4.									
5.									

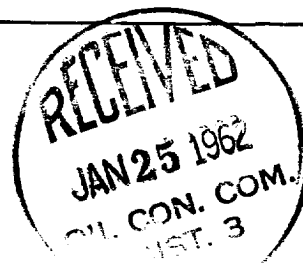
Absolute Potential: 896 MCFPD; n .85COMPANY Socony Mobil Oil Company, Inc.ADDRESS P. O. Box 3371, Durango, ColoradoAGENT and TITLE Max Beazley - Prod. Engr.

WITNESSED \_\_\_\_\_

COMPANY \_\_\_\_\_

## REMARKS

NMOCC 4 EPNG Galloway 1  
File 1 EPNG Parrish 1  
GWT 1 EPNG Disp. 1



## 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  $P_t$ .