

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin-Sahota Formation Sahota County San Juan  
Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 9-13-64  
Company PAN AMERICAN PETROLEUM CORP. Lease C. A. McAdams "C" Well No. 1  
Unit K Sec. 3 Twp. 27N Rge. 10W Purchaser \_\_\_\_\_  
Casing 4-1/2 Wt. 10.5 I.D. 4.052 Set at 6419 Perf. 6292-6300/6310 To 6320/6326-42  
Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 6196 Perf. 6162 To 6168  
Gas Pay: From 6292 To 6342 L 6317 xG .700 -GL 4422 Bar.Press. 12  
Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well Single  
Single-Bradenhead-G. G. or G.O. Dual  
Date of Completion: 9-9-64 Packer None Reservoir Temp. \_\_\_\_\_

## OBSERVED DATA

Tested Through (Proven) (Choke) (Surface) Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Proven) (Line) Size	(Choke) (Surface) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	<u>2 1/2</u>	<u>.750</u>	<u>437</u>			<u>1937</u>		<u>1941</u>		
1.	<u>2 1/2</u>	<u>.750</u>	<u>437</u>			<u>437</u>	<u>50° est.</u>	<u>929</u>	<u>50° est.</u>	<u>3 hr.</u>
2.										
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.	<u>12.3630</u>		<u>449</u>	<u>1.000</u>	<u>.9258</u>	<u>1.057</u>	<u>5433</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> 1953 P<sub>c</sub> 2,814,200

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.									
3.									
4.									
5.									

Absolute Potential: 6623 MCFPD; n .73

COMPANY PAN AMERICAN PETROLEUM CORPORATION  
ADDRESS Box 490, Santa Fe, New Mexico  
AGENT and TITLE F. L. Hubers, District Engineer  
WITNESSED [Signature]  
COMPANY \_\_\_\_\_

REMARKS

RECEIVED

JAN 10 1965

OIL CON. COM.  
DIST. 3

## 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  $P_t$ .