

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Dakota Formation Dakota County San Juan  
 Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 11-1-63  
 Company PAN AMERICAN PETROLEUM CORP. Lease Gallegos Canyon Unit Well No. 145  
 Unit NE/4 Sec. 26 Twp. 29N Rge. 12W Purchaser \_\_\_\_\_  
 Casing 4-1/2 Wt. 10.5 I.D. 4.052 Set at 6150 Perf. 6042-50/6058-64 To 6076-6000  
 Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 6030 Perf. Open To \_\_\_\_\_  
 Gas Pay: From 6042 To 6000 L 6061 xG 0.68 -GL 4243 Bar.Press. 12  
 Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well Single  
 Date of Completion: 10-25-63 Packer None Single-Bradenhead-G. G. or G.O. Dual  
 Reservoir Temp. \_\_\_\_\_

OBSERVED DATA

Tested Through (PROVER) (Choke) (PROVER) Type Taps Flange

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.		
	(Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.		Press. psig	Temp. °F.
1.	<u>7 day</u> <u>2"</u>	<u>.750</u>	<u>492</u>			<u>2006</u> <u>792</u>	<u>60° est.</u>	<u>2074</u> <u>1244</u>	<u>60° est.</u>	<u>3 hrs.</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>12.3650</u>		<u>492</u>	<u>1.000</u>	<u>0.9993</u>	<u>1.000</u>	<u>6038</u>
2.							
3.							
4.							
5.							

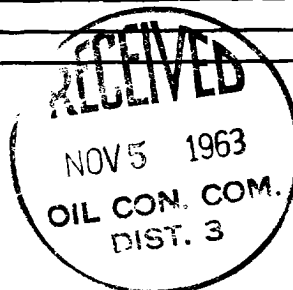
PRESSURE CALCULATIONS

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> 2106 P<sub>c</sub><sup>2</sup> 4,435,236

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>1,020,176</u>	<u>2,007,060</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 8337 MCFPD; n .75  
 COMPANY PAN AMERICAN PETROLEUM CORPORATION  
 ADDRESS P. O. Box 490, Farmington, New Mexico  
 AGENT and TITLE F. L. HARRIS, District Engineer  
 WITNESSED By [Signature]  
 COMPANY F. W. FOSTER

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.
- $F_{pv}$  = 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  $P_t$ .