

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Atero Chacra Formation Chacra County Pio Arriba  
Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test September 29, 1961  
Company San American Petroleum Corp. Lease Jicarilla Contract 146 Well No. 14  
Unit J Sec. 9 Twp. 25N Rge. 5E Purchaser \_\_\_\_\_  
Casing 1-1/2" Wt. 2.5 I.D. 4.090 Set at 3978 Perf. 3831-3835 To 3843-3850  
Tubing 2-3/8" Wt. 4.7 I.D. 1.995 Set at 3832 Perf. open ended To \_\_\_\_\_  
Gas Pay: From 3830 To 3850 L 3832 xG 0.700 est GL 2682 Bar.Press. 12  
Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well Single Gas  
Date of Completion: 9-5-61 Packer None Single-Bradenhead-G. G. or G.O. Dual  
Reservoir Temp. Unknown

## OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)

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	Shut-in	22 days				926		926		
1.	2-inch	3/4 inch	128		60 est	155	60 est	349	60 est	3 hrs.
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.	12.365		140	1.000	0.9258	1.015	1162
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> 938 P<sub>c</sub><sup>2</sup> 879,844

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.							130,321	749,523	
3.									
4.									
5.									

Absolute Potential: 1309 MCFPD; n 0.75

COMPANY San American Petroleum Corporation

ADDRESS P. O. Box 420, Farmington, New Mexico

AGENT and TITLE L. E. Inner, Jr. Senior Petroleum 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  $P_t$ .