

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Blanco Formation Manzanero County San Juan  
Initial \_\_\_\_\_ Annual \_\_\_\_\_ Special X (After W) Date of Test 12-5-63  
Company PURCO PETROLEUM CORP. Lease Decher Primo Well No. 1  
Unit 2 Sec. 19 Twp. 34N Rge. 10W Purchaser El Paso Natural Gas Company  
Casing 4 1/2 Wt. 10.5 I.D. \_\_\_\_\_ Set at 5393 Perf. 5160 To 5320  
Tubing 2 3/8 Wt. 4.7 I.D. \_\_\_\_\_ Set at 5294 Perf. 5257 To \_\_\_\_\_  
Gas Pay: From 4748 To 5353 L \_\_\_\_\_ xG \_\_\_\_\_ -GL \_\_\_\_\_ Bar. Press. \_\_\_\_\_  
Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well Single  
Date of Completion: 11-27-63 Packer \_\_\_\_\_ Single-Bradenhead-G. G. or G.O. Dual  
Reservoir Temp. \_\_\_\_\_

## OBSERVED DATA

Tested Through (Packer) Blanco (Choke) (100000)

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	2"	.750				914		914	94	
1.						364		869		
2.						361		853		
3.						376		844	94	
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.	11.9188		388	.9688	.9463	1.032	4379
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>)

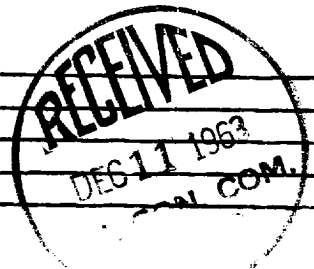
Specific Gravity Separator Gas .671  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> 926 P<sub>c</sub><sup>2</sup> 857.476

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.						856			
2.						732,736	124,740		
3.									
4.									
5.									

Absolute Potential: 19,346 MCFPD; n \_\_\_\_\_

COMPANY PURCO PETROLEUM CORP.  
ADDRESS Postoffice Box 2, Artes, New Mexico  
AGENT and TITLE Sam E. Jamerson, District Manager  
WITNESSED Glen O. Rhodes  
COMPANY Purco Petroleum Corp.

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  $P_t$ .