

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Tapacito Pictured Cliffs Formation Pictured Cliffs County Rio Arriba  
Initial XX Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 9-26-64  
Company Southern Union Production Co. Lease McCroden Well No. 3  
Unit 0 Sec. 3 Twp. 25-N Rge. 3-W Purchaser Southern Union Gas Company  
Casing 4-1/2 Wt. 9.50 I.D. 4.090 Set at 3864 Perf. 3780 To 3808  
Tubing 1-1/2 Wt. 2.90 I.D. 1.610 Set at 3727 Perf. 3717 To 3727  
Gas Pay: From 3780 To 3808 L 3717 xG .650 -GL 2416 Bar.Press. 12.0  
Producing Thru: Casing \_\_\_\_\_ Tubing XX Type Well Single Gas  
Single-Bradenhead-G. G. or G.O. Dual  
Date of Completion: 9/19/64 Packer \_\_\_\_\_ Reservoir Temp. \_\_\_\_\_

## 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						763		764		7 days
1.	2"	3/4"	74		55	74	55	518		3 hrs.
2.										
3.										
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.	12.3650		86	1.0048	.9608		1027
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> 776 P<sub>c</sub><sup>2</sup> 602176

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.						280900	321276		.683
2.									
3.									
4.									
5.									

Absolute Potential: 1752 MCFPD; n .85COMPANY Southern Union Production CompanyADDRESS P. O. Box 808 - Farmington, New MexicoAGENT and TITLE Verne Rockhold - Jr. Engineer

WITNESSED \_\_\_\_\_

COMPANY \_\_\_\_\_

cc: (3) New Mexico O.C.C.

cc: (1) Mr. Paul Clote

cc: (1) Mr. Bob McCrary - Prod. Co.

cc: (1) Mr. Bob Corliass - Gas Co.

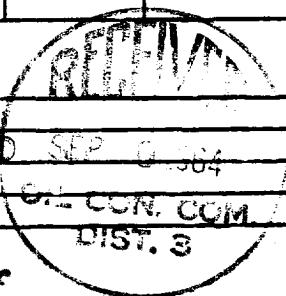
cc: (1) Mr. Rudy Motto - Gas Co.

cc: (1) Mr. Todd Hickman - Gas Co.

cc: (1) File

REMARKS

Trace of Water



## 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  $P_t$ .