

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Tanqueito Pictured Cliffs Formation Pictured Cliffs County Rio Arriba

Initial X Annual _____ Special _____ Date of Test January 3, 1958

Company Southern Union Gas Company Lease Jicarilla Well No. 2-0

Unit H Sec. 1 Twp. 26N Rge. 5W Purchaser _____

Casing 9 5/8 Wt. 32.3 I.D. _____ Set at 4,255 Perf. 4104' To 4205'

Tubing 2 3/8 Wt. 4.7 I.D. 2.0 Set at 4,202 Perf. 4172' To 4202'

Gas Pay: From _____ To _____ L _____ xG _____ -GL _____ Bar.Press. 12.0

Producing Thru: Casing _____ Tubing X Type Well Single - Gas

Date of Completion: December 1, 1957 Packer None 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 _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1019		1018		33 days
1.		3/4"	411 1/2			411 1/2	58°	906 1/2		3 hrs.
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w P_f}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.3650		423 1/2	1.0019	.9463	1.047	5,198.1
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.

Gravity of Liquid Hydrocarbons _____ deg.

F_c _____ (1-e^{-S}) _____

Specific Gravity Separator Gas _____

Specific Gravity Flowing Fluid _____

P_c 1030 P_c² 1060.9

P_w 918.5 P_w² 843.6

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-S})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w /P _c
1.						843.6	217.3		
2.									
3.									
4.									
5.									

Absolute Potential: 20,005 MCFPD; n 0.85

COMPANY Southern Union Gas Company

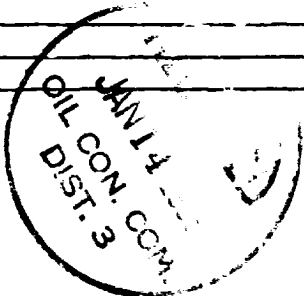
ADDRESS P. O. Box 815 Farmington, New Mexico

AGENT and TITLE Thomas E. Fenne, Jr. 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} - 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 .

