

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool South Blanco Pictured Cliffs Formation Pictured Cliffs County Rio Arriba

Initial X Annual _____ Special _____ Date of Test June 24, 1958

Company Southern Union Gas Co. Lease Jicarilla Well No. 3-H

Unit L Sec. 19 Twp. 26N Rge. 4W Purchaser Southern Union Gas Co.

Casing 5 1/2" Wt. 15.5# I.D. 4.950 Set at 3281 Perf. 3208 To 3250

Tubing 2 3/8" Wt. 4.7# I.D. 1.995 Set at 3233 Perf. 3218 To 3233

Gas Pay: From 3208 To 3250 L _____ xG 0.67 -GL _____ Bar.Press. 12.0

Producing Thru: Casing _____ Tubing X Type Well Single Gas

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: June 15, 1958 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 _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1046		1048		8 days
1.		3/4"	238		62°	238	62°	609		3 hours
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		250	0.9981	0.9463	1.028	3001
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
 Gravity of Liquid Hydrocarbons _____ deg.
 P_c _____ (1-e^{-s}) _____
 Specific Gravity Separator Gas _____
 Specific Gravity Flowing Fluid _____
 P_c 1060 P_c 1123.6
 P_w 621 P_w 385.6

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.						385.6	738.0		0.586
2.									
3.									
4.									
5.									

Absolute Potential: 4,291 MCFPD; n 0.85
 COMPANY Southern Union Gas Company
 ADDRESS P. O. BOX 815, Farmington, New Mexico
 AGENT and TITLE G. L. Hoffman
 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 .

