

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Dakota Formation Dakota County San Juan
Initial XX Annual _____ Special _____ Date of Test 12-13-61
Company Southern Union Production Co. Lease Zachry Well No. 15
Unit N Sec. 33 Twp. 29N Rge. 16W Purchaser Southern Union Gas Company
Casing 4 1/2" Wt. 10.50 I.D. 4.052 Set at 6647 Perf. (6562) To (6576)
Tubing 1 1/2" Wt. 2.90 I.D. 1.610 Set at 6373 Perf. (6452) To (6490)
Gas Pay: From 6372 To 6576 L 6372 xG .68 -GL 4333 Bar.Press. 12.0
Producing Thru: Casing _____ Tubing XX Type Well Single-Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 12/2/61 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) (Choke) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						2033		2033		
1.		3/4"	364		70°	364	70°	1601		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		376	.9995	.9393	1.040	4498
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 2045 P_c 4182.03

No.	$\frac{P_w}{P_t}$ (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	$\frac{P_w}{P_c}$
1.						2601.77	1580.26		.7887
2.									
3.									
4.									
5.									

Absolute Potential: 9332 MCFPD; n .75COMPANY Southern Union Production Co.ADDRESS P. O. Box 808, Farmington, New MexicoAGENT and TITLE L. S. Muenink, Production SuperintendentWITNESSED Val RipperCOMPANY Southern Union Production 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 .

STATE OF NEW MEXICO	
OIL COMMISSION	
COUNTY OF _____	
WELL NO. _____	
DATE OF TEST _____	
TESTER _____	
SUPERVISOR _____	
TRANSMITTED	FILED
PREPARED BY	DATE
OFFICE	DATE