

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 10-17-62
Company Southern Union Production Co. Lease Congress Well No. #5
Unit G Sec. 34 Twp. 29-North Rge. 11-West Purchaser Southern Union Gas Company
Casing 4 1/2 Wt. 10.5 I.D. 4.052 Set at 6430 Perf. 6171 To 6340
Tubing 2 3/8 Wt. 4.70 I.D. 1.995 Set at 6275 Perf. 6250 To 6260
Gas Pay: From 6171 To 6340 L 6250 xG .700 -GL 4375 Bar.Press. 12.0
Producing Thru: Casing _____ Tubing xx Type Well Single Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 10-9-62 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						2016		2024		7 days
1.	2"	3/4	522		86	522	86	1213		3 hours
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	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		534	.9759	.9258	1.057	6306
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})

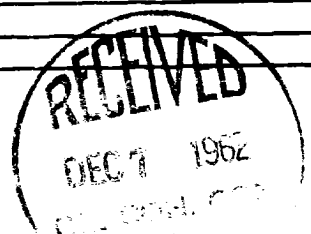
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2036 P_c 4145.3

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.						1500.6	2604.7		.602
2.									
3.									
4.									
5.									

Absolute Potential: 8844 MCFPD; n .75COMPANY Southern Union Production CompanyADDRESS Box 808, Farmington, New MexicoAGENT and TITLE Verne Rockhold, Jr. EngineerWITNESSED Verne RockholdCOMPANY Southern Union Production Company

REMARKS

CC:
(3) New Mexico O. C. C.
(1) Mr. Len Muennink
(1) Mr. Val Ripper
(1) Mr. Rudy Motte
(1) Mr. Bob Corliss
(1) Mr. Paul Clote



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 .