

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Tapacito East Formation Piedmont Cliff County Rio Arriba
Initial x Annual _____ Special _____ Date of Test 7-18-56
Company S. H. G. Lease McCroder Well No. 1 A
Unit 1 Sec. 2 Twp. 25 N Rge. 3 W Purchaser Southern Union Gas Company
Casing 5 1/2 Wt. 16.5 I.D. _____ Set at 3758 Perf. 3675 To 3713
Tubing 2 3/8 Wt. 14.7 I.D. _____ Set at 3672 Perf. _____ To _____
Gas Pay: From 3675 To 3713 L _____ xG 0.65 -GL _____ Bar. Press. 11.0
Producing Thru: Casing _____ Tubing x Type Well Single Gas
Date of Completion: 7-7-56 Packer _____ Reservoir Temp. _____
Single-Bradenhead-G. G. or G.O. Dual

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.	
SI								
1.						1027		
2.		3/4	349		46	349	469	3 hours
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		360	1.9137	0.9535	1.042	483
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 1038 P_c 1077.44
P_w 771

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.						521.44	483		
2.									
3.									
4.									
5.									

Absolute Potential: 8872 MCFPD; n 0.5
COMPANY _____
ADDRESS _____
AGENT and TITLE _____
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 .

OIL CONSERVATION COMMISSION	
AZTEC DISTRICT OFFICE	
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