

3-000
1-Bill Parrish
1-Dallas
1-File

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 X Annual _____ Special _____ Date of Test 12/28/60
Company Southwest Production Company Lease Raymond Simmons Well No. 1
Unit M Sec. 17 Twp. 30N Rge. 11W Purchaser El Paso Natural Gas Company
Casing 5 1/2" Wt. 17# I.D. 4.892 Set at 6693 Perf. 6483 To 6509
Tubing 2 3/8" Wt. 4.70# I.D. 1.995 Set at 6501 Perf. _____ To 6501
Gas Pay: From 6483 To 6509 L 6501 xG .67 -GL 4356 Bar.Press. 12.0
Producing Thru: Casing _____ Tubing X Type Well Single-Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 12/16/60 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (~~Prover~~) (Choke) (~~Prover~~) 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										
1.		<u>3/4"</u>	<u>248</u>		<u>67</u>	<u>2051</u> <u>266</u>	<u>67</u>	<u>2070</u> <u>638</u>		<u>7-Day</u> <u>3-hrs.</u>
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.	<u>12.3650</u>		<u>260</u>	<u>.9933</u>	<u>.9463</u>	<u>1.028</u>	<u>3,106</u>
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 2082 P_c² 4335
P_w 670 P_w² 449

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.						<u>449</u>	<u>3886</u>		<u>.322</u>
2.									
3.									
4.									
5.									

Absolute Potential: 3,354 MCFPD; n .75

COMPANY Southwest Production Company

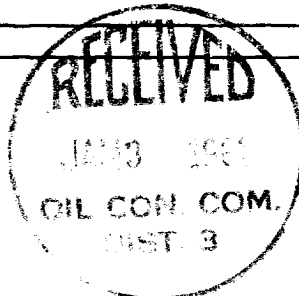
ADDRESS 162 Petr. Center Bldg., Farmington, New Mexico

AGENT and TITLE George L. Neffman, Production Foreman

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 .

STATE OF NEW MEXICO	
OIL CONSERVATION COMMISSION	
AZTEC DISTRICT OFFICE	
NUMBER OF COPIES RECEIVED	3
DATE	
FILE	
U.S.G.S.	
LAND OFFICE	
TRANSPORTER	
PRODUCTION OFFICE	
OPERATOR	