

3-OCC
1-EPNG Parrish
1-WD
1-D, 2-F

SWP-102

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELL

Pool Basin Dakota Formation Dakota County San Juan
Initial y Annual _____ Special _____ Date of Test 4/22/62
Company Southwest Production Company Lease Doubtful Federal Well No. 3
Unit L Sec. 26 Twp. 27N Age. 11 W Purchaser El Paso Natural Gas Company
Casing 4 1/2 Wt. 10.50 I.D. 4.052 Set at 6699 Perf. 6604 To 6618
Tubing 1 1/2 Wt. 2.75 I.D. 1.610 Set at 6568 Perf. Open To End
Gas Pay: From 6604 To 6618 L 6559 G .67 -GL _____ Bar. Press. 12.0
Producing Thru: Casing _____ Tubing X Type Well Single Gas
Single-Bradenhead-G. P. or G.O. Dr. _____
Date of Completion: 4/3/62 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Boomer) (Choke) (Maerx) _____ Line Taps _____

No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Flow Data		Temp.	Tubing Data		Temp.	Casing Data		Duration Flow hr.
			Press. psig	Diff. h _v		Press. psig	Temp. °F.		Press. psig	Temp. °F.	
SI						2008			2014		7 days
1.		3/4"	184		70	184	70		1231		3 hours
2.											
3.											
4.											
5.											

FLOW CALCULATIONS

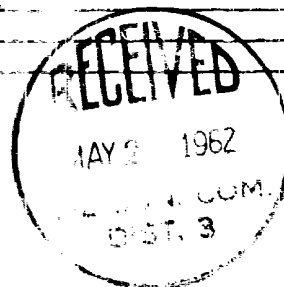
No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{ps}	Rate of Flow Q-MCFD @ 15.0 psia
1.	12.3650		126	.9905	.9463	1.021	2,300
2.							
3.							
4.							
5.							

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 Gas _____
P_c 2025 P_c² 4104.6
P_w 1243 P_w² 1545.0

No.	P _w P _t (psia)	F _c Q	(F _c Q) ²	P _w ²	P _w ² - (F _c Q) ²	Cal. P _w	P _w C
1.						2559.6	.413
2.							
3.							
4.							
5.							

Absolute Potential: 3,304 MOPED: .75
COMPANY Southwest Production Company
ADDRESS 207 Petr. Club Plaza, Farmington, New Mexico
AGENT and TITLE George L. Hoffman, Production Engineer
WITNESSED _____
COMPANY _____



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 .