

3-00C

1-Bill Parrish EPNG

NEW MEXICO OIL CONSERVATION COMMISSION

1-WD

1-D

1-F

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 3/7/61

Company Southwest Production Company Lease Campbell Federal Well No. 3

Unit K Sec. 26 Twp. 27N Rge. 12W Purchaser El Paso Natural Gas Company

Casing 5½ Wt. 15.5 I.D. 4.990 Set at 6050 Perf. 5896 To 5937

Tubing 2 3/8 Wt. 4.70 I.D. 1.995 Set at 5971 Perf. _____ To 5971

Gas Pay: From 5896 To 5937 L 5971 xG .67 -GL 4001 Bar.Press. 12.0

Producing Thru: Casing _____ Tubing X Type Well Single-Gas

Date of Completion: 2/19/61 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) (Prover) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1970		1974		7-Day
1.		3/4"		210	76	210	76	606		3-Hr
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		224	.9850	.9463	1.022	2,638
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 **1992** P_c **3968**

P_w **618** P_w **381**

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.						381	3587		.310
2.									
3.									
4.									
5.									

Absolute Potential: **2,822** MCFPD; n **.75**

COMPANY Southwest Production Company

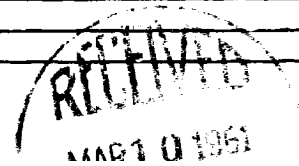
ADDRESS 162 Petr. Center Bldg., Farmington, N. M.

AGENT and TITLE George L. Hoffman, 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} = 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 .