

2900C

1-Western Dev.

NEW MEXICO OIL CONSERVATION COMMISSION

1-EPNG (Bill Parrish)

1-Dallas

1-File

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin-Dakota Formation Dakota County San JuanInitial X Annual _____ Special _____ Date of Test 12/20/60Company Southwest Production Company Lease Edgar Federal Well No. #4Unit J Sec. 15 Twp. 27N Rge. 12W Purchaser El Paso Natural Gas CompanyCasing 5 1/2" Wt. 15.5 I.D. 4.990 Set at 6209 Perf. 6038 To 6056Tubing 2 3/8" Wt. 4.70 I.D. 1.995 Set at 6076 Perf. _____ To 6076Gas Pay: From 6038 To 6056 L 6076 xG .67 -GL _____ Bar.Press. 12.0Producing Thru: Casing _____ Tubing X Type Well Single-Gas

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 12/8/60 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (REMOVED) (Choke) (REMOVED) 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						<u>2033</u>		<u>2035</u>		<u>7-Day</u>
1.		<u>3/4"</u>	<u>448</u>		<u>80</u>	<u>448</u>		<u>1035</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>460</u>	<u>.9813</u>	<u>.9463</u>	<u>1.046</u>	<u>5,525</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 2047 P_c^2 4190
 P_w 1047 P_w^2 1096

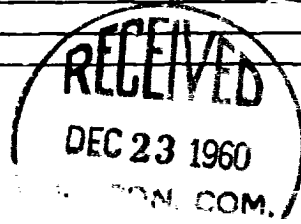
No.	P_w P_t (psia)	P_t^2	$F_c Q$	$(F_c Q)^2$	$(F_c Q)^2$ ($1-e^{-S}$)	P_w^2	$P_c^2 - P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.						<u>1096</u>	<u>3094</u>		<u>.511</u>
2.									
3.									
4.									
5.									

Absolute Potential: 6,906 MCFPD; n .75COMPANY Southwest Production CompanyADDRESS 162 Petr. Center Bldg., Farmington, New MexicoAGENT 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 .