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1-M. L. Kendrick

1-Bill Parrish

2-EPNG El Paso & Farm.

1-D 1-WD

1-F

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

SWP-150

Pool Basin Dakota Formation Dakota County S.J.Initial X Annual _____ Special _____ Date of Test 7/2/63Company Southwest Production Company Lease Fouille Federal Well No. 1Unit N Sec. 35 Twp. 28 N Rge. 9 W Purchaser El Paso Natural Gas CompanyCasing 4 1/2" Wt. 10.50 I.D. 4.052 Set at 6758 Perf. 6539 To 6728Tubing 1 1/2" Wt. 2.75 I.D. 1.610 Set at 6666 Perf. _____ To 6666Gas Pay: From 6539 To 6728 L 6666 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: 6/24/63 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Pressure) (Choke) (Pressure) Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Pressure) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						2217		2257		7 days
1.		3/4"	322		76°	322	76°	1481		3 hrs.
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 _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.3659		334	.9850	.9463	1.032	3.971
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
P_c _____ (1-e^{-s})Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2269 P_c 5148.3
P_w 1493 P_w 2229.0

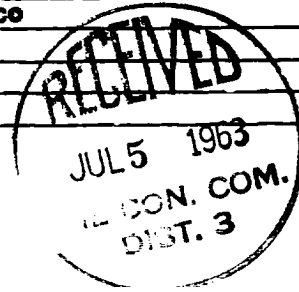
No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.						2229.0	2919.3		.657
2.									
3.									
4.									
5.									

Absolute Potential: 6.075 MCFPD; n .75COMPANY Southwest Production CompanyADDRESS 234 Petr. Club Plaza, Farmington, New MexicoAGENT and TITLE George L. Hoffman, Production Engineer

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 .