

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Mesa Verde Formation Mesa Verde County San Juan
 Initial IX Annual _____ Special _____ Date of Test 6-18-65
 Company Southern Union Production Lease Federal Lease Well No. 1
 Unit 1 Sec. 36 Twp. 19-N Rge. 2-W Purchaser El Paso Natural Gas Company
 Casing 2" Wt. 15.0 I.D. 4.600 Set at 6710 Perf. 3009 To 6412
 Tubing 1-1/4" Wt. 2.30 I.D. _____ Set at 6459 Perf. 6446 To 6453
 Gas Pay: From 3009 To 6448 L 6445 xG .690 -GL 1047 Bar.Press. 12.0
 Producing Thru: Casing _____ Tubing 1 Type Well Dual Gas
 Date of Completion: 5/2/65 Packer 6300 Single-Bradenhead-G. G. or G.O. Dual
 Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)

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						915		911		15 days
1.	2"	3/4"	117		150	117	150	701		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.	12.150		119	1.001	.985	1.013	1514
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

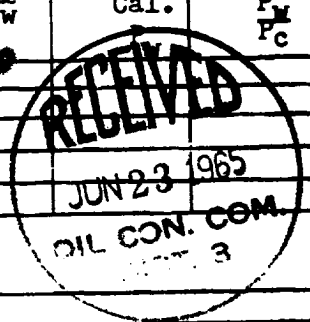
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
 Gravity of Liquid Hydrocarbons _____ deg.
 F_c _____ (1-e^{-s})

Specific Gravity Separator Gas _____
 Specific Gravity Flowing Fluid _____
 P_c 957 P_c 9120

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 _c
1.						10000	27510		
2.									
3.									
4.									
5.									

Absolute Potential: 3724 MCFPD: n .75
 COMPANY Southern Union Production Company
 ADDRESS P.O. Box 800 - Farmington, New Mexico
 AGENT and TITLE Verne S. Rockhold - Engineer
 WITNESSED Herman Knealy
 COMPANY El Paso Natural Gas Company

Original Signed By
 VERNE ROCKHOLD



REMARKS

- (3) cc: New Mexico O.C.C.
 (1) cc: Mr. Paul Clote
 (1) cc: El Paso Natural Gas Co., Production Dept., P.O. Box 1492, El Paso, Texas
 (1) cc: Mr. A. L. Kindrick, Box 790, Farmington, New Mexico
 (1) cc: File

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 .