

NEW MEXICO OIL CONSERVATION COMMISSION

TEST AFTER WORK OVER

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Blanco Mesaverde Formation Mesaverde County San JuanInitial _____ Annual _____ Special XX Date of Test 3-23-65Company Southern Union Production Co. Lease Robert Mims State Well No. 1Unit M Sec. 16 Twp. 29-N Rge. 9-W Purchaser Southern Union Gas CompanyLINER 4.0 11.34 3.428 3555 to 4730Casing 5-1/2 Wt. 15.5 I.D. 4.950 Set at 3622 Perf. 3725 To 46181-1/2 2.90 1.610 4565Tubing 2-3/8 Wt. 4.70 I.D. 1.995 Set at 3292 Perf. 4557 To 4565Gas Pay: From 3725 To 4618 L 4557 xG .680 -GL 3099 Bar.Press. 12.0Producing Thru: Casing _____ Tubing XX Type Well Single Gas

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

Date of Completion: 3-15-65 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps _____

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						845		853		8 days
1.	2"	3/4	218		75°	218	75	701		3 hrs.
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		230	.9859	.9393	1.022	2692
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 865 P_c 748225

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.						508369	239856		.824
2.									
3.									
4.									
5.									

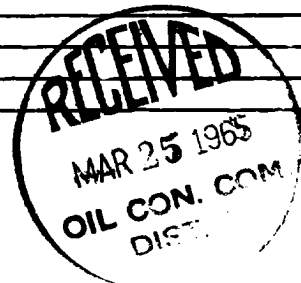
Absolute Potential: 6319 MCFPD; n .75COMPANY Southern Union Production CompanyADDRESS P. O. Box 808 - Farmington, New MexicoAGENT and TITLE Verne Rockhold - Jr. Engineer

Original Signed By

VERNE ROCKHOLD

WITNESSED John ReatorCOMPANY Southern Union Production Companycc: (3) New Mexico O.C.C.cc: (1) Mr. Paul Clote - Dallascc: (1) Mr. Bob Corless - Dallascc: (1) Mr. Bob McCrary - Dallascc: (1) Mr. Rudy Motto - Kutzcc: (1) Mr. Todd Hickman - Kutzcc: (1) File

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 .