

ILLECIBLE

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Dakota Formation Dakota County San Juan
Initial xx Annual _____ Special _____ Date of Test 11-30-62
Company Southern Union Production Co. Lease Angel Peak Well No. 24-2
Unit II Sec. 13 Twp. 21-North Rge. 11-West Purchaser Southern Union Gas Company
Casing 1 1/2 Wt. 10.50 I.D. 1.052 Set at 6761 Perf. 6318 To 654
Tubing 1 1/2 Wt. 8.90 I.D. 1.610 Set at 6328 Perf. 6313 To 6328
Gas Pay: From 6318 To 654 L 6313 xG .700 -GL 1419 Bar.Press. 12.0
Producing Thru: Casing _____ Tubing xx Type Well Single - Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 11-23-62 Packer None Reservoir Temp. _____

OBSERVED DATA

Tested Through (Proven) (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.	
1.	2"	3/4	117		68	1875	68	1876		7-Days
2.						117		1630		3-Hours
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		129	.9924	.9258	1.050	5117
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 1888 P_c 3564.5

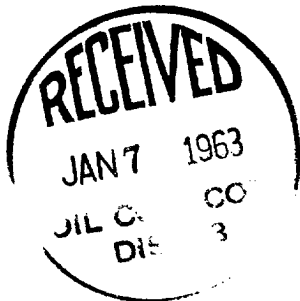
No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w /P _c
1.						2696.2	848.3		.870
2.									
3.									
4.									
5.									

Absolute Potential: 14757 MCFPD; n .75

COMPANY Southern Union Production Company
ADDRESS Box 808, Farmington, New Mexico
AGENT and TITLE Verne Rockhold, Jr. Engineer
WITNESSED Verne Rockhold
COMPANY Southern Union Production Company

REMARKS

- CC: (3) New Mexico O. C. C.
(1) Mr. Rudy Motto
(1) Mr. Bob Corliss
(1) Mr. Paul Clete
(1) Mr. Len Macmink
(1) 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} = 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 .