

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Tapacito P.C. Formation Pictured Cliffs County Rio Arriba
Initial X Annual _____ Special _____ Date of Test Sept. 1, 1961
Company Southern Union Production Co. Lease Martinez Well No. 1
Unit M Sec. 2 Twp. 25N Rge. 3W Purchaser Southern Union Gas Company
Casing 3 1/2" Wt. 9.30 I.D. 2.992 Set at 3861 Perf. 3781 To 3811
Tubing 1 1/2" Wt. 2.75 I.D. 1.610 Set at 3670 Perf. 3666 To 3670
Gas Pay: From 3781 To 3811 L _____ xG 0.67 -GL _____ Bar.Press. 12.0
Producing Thru: Casing _____ Tubing X Type Well Single Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: Aug. 25/61 Packer - Reservoir Temp. -

OBSERVED DATA

Tested Through ~~026555~~ (Choke) ~~026555~~ Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) <u>026555</u> Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						<u>1003</u>		<u>1004</u>		<u>7 days</u>
1.		<u>3/4"</u>	<u>120</u>		<u>53°F</u>	<u>120</u>	<u>53°F</u>	<u>660</u>		<u>3 hrs.</u>
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.	<u>12.3650</u>		<u>132</u>	<u>1.0068</u>	<u>0.9463</u>	<u>1.014</u>	<u>1577</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 1016 P_c² 1032
P_w 672 P_w² 452

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.						<u>452</u>	<u>580</u>		<u>0.661</u>
2.									
3.									
4.									
5.									

Absolute Potential: 2,580 MCFPD; n 0.85

COMPANY SOUTHERN UNION PRODUCTION COMPANY

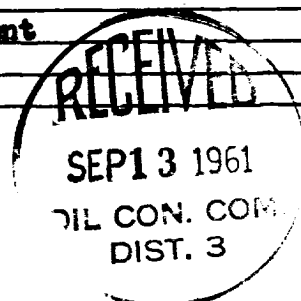
ADDRESS P. O. Box 808, Farmington, New Mexico

AGENT and TITLE Gilbert D. Noland, Jr. Drilling Superintendent

WITNESSED Gilbert D. Noland Jr.

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_1} = 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_{sv} - 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 .

START OF NEW DAY
ON CAR
MAY 1963
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