

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Southern Blanco Formation Pictured Cliff County Rio Arriba
Initial X Annual _____ Special _____ Date of Test 6/12/58
Company Southern Union Gas Company Lease Jicarilla Well No. 7-K
Unit B Sec. 12 Twp. 35 Rge. 5 Purchaser El Paso Natural Gas Company
Casing 5 1/2" Wt. 15.5 I.D. 4.950 Set at 3872 Perf. 3704 To 3764
Tubing 2 3/8" Wt. 4.7 I.D. 1.995 Set at 3744 Perf. 3729 To 3744
Gas Pay: From 3704 To 3764 L 3729 xG 0.67 -GL 2497 Bar.Press. 12.0
Producing Thru: Casing _____ Tubing X Type Well Single Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 5/31/58 Packer _____ 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.	
1.										7 days
2.		<u>3/4"</u>	<u>451</u>		<u>61°</u>	<u>451</u>	<u>61°</u>	<u>415</u>		3 hours
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>463</u>	<u>0.9990</u>	<u>0.9463</u>	<u>1.053</u>	<u>5,699</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 944 P_c^2 891.1

P_w 857 P_w^2 734.4

No.	P_w P_t (psia)	P_c^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	$\frac{P_w}{P_c}$
1.						<u>734.4</u>	<u>156.7</u>		<u>0.910</u>
2.									
3.									
4.									
5.									

Absolute Potential: 24,961 MCFPD; n 0.85

COMPANY SOUTHERN UNION GAS COMPANY

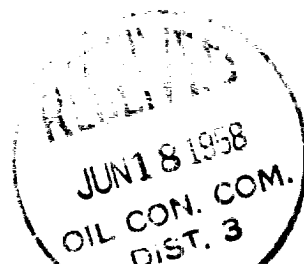
ADDRESS P. O. Box 815, Farmington, New Mexico

AGENT and TITLE G. L. Hoffman

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} = 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 .

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AZTEC DISTRICT OFFICE		
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By	<u>1</u>	<input checked="" type="checkbox"/>