

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Wildcat Formation Todito County Rio Arriba
Initial X Annual _____ Special _____ Date of Test Dec. 14, 1956
Company Southern Union Gas Company Lease Jicarilla Well No. #6-E
Unit B Sec. 21 Twp. 26N Rge. 4 W Purchaser Southern Union Gas Company
Casing 5 1/2" Wt. 17.00 I.D. 4.892 Set at 0000-5518 Perf. 7140 To 7153
Tubing 2 3/8" Wt. 4.7 I.D. 2.0 Set at 7130 Perf. 7100 To 7130
Gas Pay: From 7140 To 7153 L _____ xG 0.73 -GL _____ Bar. Press. 12.0
Producing Thru: Casing _____ Tubing X Type Well Single Gas
Date of Completion: Jan. 5, 1957 Packer _____ Reservoir Temp. _____
Single-Bradenhead-G. G. or G.O. Dual

OBSERVED DATA

Tested Through (Pressure) (Choke) (Valve) 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						1730		1732		7 day
1.		3/4	475			475	77°	1105	77°	3 hr.
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.	12.3650		487	0.9840	0.9966	1.056	5663
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 _____ P_c² _____

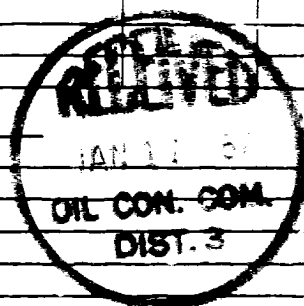
No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.									
2.									
3.									
4.									
5.									

Absolute Potential _____ MCFPD; n _____

COMPANY Southern Union Gas CompanyADDRESS Box 65, Farmington, New MexicoAGENT and TITLE Gilbert Roland, Jr. Jr. EngineerWITNESSED Ed HayesCOMPANY Humble Oil & Refining Company

REMARKS

Gas Gravity estimated - Absolute potential not calculated since factor "n" was not determined and is unknown. Well plugged back to a T.D. of 7200 ft.



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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