

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Astec Pictured Cliffs Formation Pictured Cliffs County San Juan
 Initial X Annual _____ Special _____ Date of Test February 9, 1959
 Company Southern Union Gas Co. Lease Armenta Well No. 1
 Unit H Sec. 27 Twp. 29N Rge. 10W Purchaser Southern Union Gas Co.
 Casing 5 1/2" Wt. 15.5 I.D. 4.950 Set at 1918 Perf. 1815 To 1880
 Tubing 1 1/2" Wt. 8.4 I.D. 1.25 Set at 1840 Perf. 1840 To 1825
 Gas Pay: From 1815 To 1880 L 1825 xG 0.67 Est. -GL 1222.7 Bar. Press. 12.0
 Producing Thru: Casing _____ Tubing X Type Well G. G. Dual
 Single-Bradenhead-G. G. or G.O. Dual
 Date of Completion: Feb. 1, 1959 Packer 1742 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
SI									
1.						614			8 days
2.		3/4"	129		54°	129	54°		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		141	1.0058	0.9463	1.014	1683
2.							
3.							
4.							
5.							

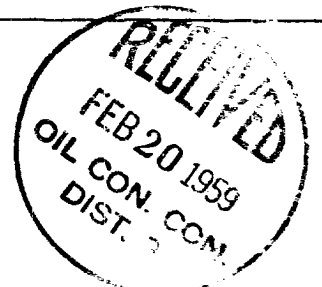
PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
 Specific Gravity Separator Gas _____
 Gravity of Liquid Hydrocarbons _____ deg.
 Specific Gravity Flowing Fluid _____
 P_c 24.62 (1-e^{-S}) 0.085 P_c 626 P_c 391.87

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.	141	19,88	41.44	1717.3	145.97	165.85	226.00	407	0.650
2.									
3.									
4.									
5.									

Absolute Potential: 2,690 MCFPD; n 0.85
 COMPANY SOUTHERN UNION GAS COMPANY
 ADDRESS P. O. Box 815, Farmington, New Mexico
 AGENT and TITLE Gilbert Holand, Jr. Asst. Drilling Superintendent
 WITNESSED Robert Davis
 COMPANY El Paso Natural Gas Company, Box 997, Farmington, New Mexico

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 .

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