

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool S. BLANCO Formation PICTURED CLIFFS County RIO ARriba
Initial x Annual _____ Special _____ Date of Test 1-5-60
Company Arizona Explorations Inc. Lease Jicarilla Well No. H-9
Unit M Sec. 32 Twp. 24N Rge. 5W Purchaser Southern Union Gas Company
Casing 5½" Wt. 14# I.D. _____ Set at 2203 Perf. 2068 To 2092
Tubing 1½" Wt. 2.4# I.D. _____ Set at 2081 Perf. 2071 To 2081
Gas Pay: From 2068 To 2092 L 2080 xG 0.690 -GL 1435 Bar.Press. 12.0
Producing Thru: Casing x Tubing _____ Type Well Single Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 12-17-59 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.	
SI										
1.		3/4"	336		58	571 373		572 336		3 hours
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		348	1.0019	0.9325	1.044	4501
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 584 P_c 584

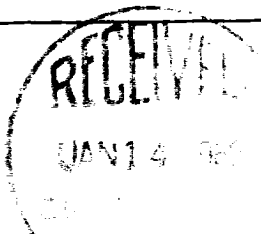
$$AOF = (4501) \left(\frac{584^2}{584^2 - 348^2} \right)^{0.85} = 6526$$

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: 6526 MCFPD; n 0.85

COMPANY Arizona Explorations Inc.
ADDRESS 417 Meadows Building, Dallas 6, Texas
AGENT and TITLE Virgil L. Stoabs, Engineer
WITNESSED George Credicott
COMPANY Arizona Explorations, Inc.

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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