

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool South Blanco Formation Dakota County Rio Arriba
Initial X Annual _____ Special _____ Date of Test 10-19-60
Company Caulkins Oil Company Lease State "B" Well No. PD-233
Unit D Sec. 16 Twp. 26N Rge. 6W Purchaser Southern Union Gas Company
Casing 4 1/2" Wt. 11.6# I.D. 4.000 Set at 7644' Perf. 7286 To 7486
Tubing 1 1/2" Wt. 2.4# I.D. 1.38 Set at 7158 Perf. 7158 To _____
Gas Pay: From 7286 To 7486 L 7158 xG .660 -GL 4724 Bar.Press. _____
Producing Thru: Casing No Tubing Yes Type Well Gas-Gas Dual
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 9-29-60 Packer 7159 Reservoir Temp. _____

OBSERVED DATA

Tested Through (XXXX) (Choke) (XXXX) 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						2233	60	PKR		7 day S.I.
1.		3/4"	163			163	60	PKR		3 hr. Flow
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.	14.1605		175	1.000	.9535	1.018	2406
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 24.62 (1-e^{-s}) 0.291
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2245 P_c 3,040.025

No.	$\frac{P_w}{P_t}$ (psia)	P _t ²	F _c Q	(F _c Q) ²	$\frac{(F_c Q)^2}{(1-e^{-s})}$	P _w ²	P _c ² -P _w ²	Cal. P _w	$\frac{P_w}{P_c}$
1.	261	68,121	39.24	3509.4	1021.2	1,089,321	3,950,704	1044	.465
2.									
3.									
4.									
5.									

Absolute Potential: 2895 MCFPD; n (1.28)ⁿ 1.2034
COMPANY Caulkins Oil Company
ADDRESS Box 780, Farmington, New Mexico
AGENT and TITLE Production Foreman
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 .

OIL	NO
NUMBER OF	3
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
TRANSPORTER	OIL
PRODUCTION OFFICE	8-3
OPERATOR	