

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool South Blanco Formation Pictured Cliffs County Rio Arriba
Initial X Annual _____ Special _____ Date of Test 5-23-59
Company Caulkins Oil Company Lease Breech "F" Well No. PMD-8
Unit A Sec. 34 Twp. 27N Rge. 6W Purchaser Southern Union Gas Company
Casing 7 5/8" Wt. 26.4# I.D. 6.969 Set at 4662 Perf. 3180 To 3224
Tubing 3/4" Wt. 1.20# I.D. _____ Set at 3152 Perf. 3157 To _____
Gas Pay: From 3180 To 3224 L 3157 xG .660 -GL 2084 Bar.Press. 12#
Producing Thru: Casing Yes Tubing _____ Type Well G.G.G. Triple
Date of Completion 5-16-59 Packer 4600 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through ~~XXXXXX~~ (Prover) ~~XXXXXX~~ (Choke) ~~XXXXXX~~ (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		3/4"	78		54°	751#	54°	751#	54°	7 day SI
1.		3/4"	78		54°	78	54°	78	54°	3 hr test
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.	14.1603		90	1.0058	.9535	1.011	1234
2.							
3.							
4.							
5.							

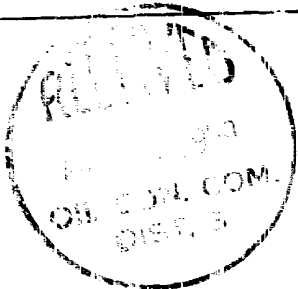
PRESSURE CALCULATIONS

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_c _____

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.						8100	574,069		.118
2.									
3.									
4.									
5.									

Absolute Potential: 1244 MCFPD; n 85
COMPANY Caulkins Oil Company
ADDRESS Box 967, Farmington, New Mexico
AGENT and TITLE Charles Verquer, 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_{ws} = 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_m = Meter pressure, psia
- P_{wm} = Differential meter pressure, inches water.
- F_g = Gravity correction factor.
- F_t = Flowing temperature correction factor.
- F_{pv} = Supercompressibility factor.
- S = 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 .