

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Mesa Verde Formation Mesa Verde County Rio Arriba
Initial X Annual _____ Special _____ Date of Test 5-23-59
Company Caulkins Oil Company Lease Ereoch "1" 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. 4844 To 5527
Tubing 1 1/2" Wt. 2.4# I.D. 1.380 Set at 5365 Perf. 5365 To _____
Gas Pay: From 4844 To 5527 L 5365 xG .660 GL 3541 Bar.Press. 12#
Producing Thru: Casing _____ Tubing Yes Type Well S.P.T. Triple
Upper 4600 Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 5-16-59 Packer Lower 2470 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						844				7 day SI
1.		3/4"	105#		55°	105#	55°			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.	14,1605		117#	1.0048	.9935	1.013	1.609
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})

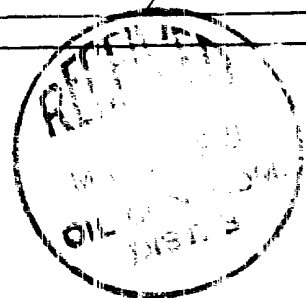
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c _____ P_c _____

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.						369,000	212,000		.720
2.									
3.									
4.									
5.									

Absolute Potential: 2787 MCFPD; n 75

COMPANY Caulkins Oil Company
ADDRESS Box 967, Farmington, New Mexico
AGENT and TITLE Charles Valdez, Production Manager
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

- 1. 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.
- 2. P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater. psia
- 3. 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
- 4. P_t = Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia
- 5. P_m = Meter pressure, psia
- 6. P_{wm} = Differential meter pressure, inches water.
- 7. g = Gravity correction factor.
- 8. T = Flowing temperature correction factor.
- 9. P_{pv} = Supercompressibility factor.
- 10. S = Slope of back pressure curve.

Note: If P_w cannot be taken because of manner of completion or condition of well, then P_t must be calculated by adding the pressure drop due to friction within the flow string to P_t .