

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Dakota Formation Dakota County Rio Arriba
Initial Yes Annual _____ Special _____ Date of Test 11-5-63
Company Caulkins Oil Company Lease Breech "C" Well No. D-248
Unit A Sec. 13 Twp. 26N Rge. 6W Purchaser Southern Union Gas Company
Casing 4 1/2" Wt. 11.6 I.D. 4.000 Set at 7482 Perf. 7220 To 7452
Tubing 2 3/8" Wt. 4.7 I.D. 1.995 Set at 7207 Perf. 7207 To _____
Gas Pay: From 7220 To 7452 L 7207 .660 100 4757 Bar.Press. 12
Producing Thru: Casing No Tubing Yes Type Well Gas Oil Dual
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 9-24-63 Packer See remarks Reservoir Temp. 180°

OBSERVED DATA

Tested Through (Proven) (Choke) (Meter) Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Proven) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						2261		2261		45 hours SI
1.		3/4"				389	70	964	70	3 hours
2.										
3.										
4.										
5.										

FLOW CAPACITY TEST

No.	Coefficient (24-Hour)	$\sqrt{h_{wPF}}$	Pressure psia	Flow Factor F _q	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	14.1605		401	1.0048	9535	1.041	5663
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

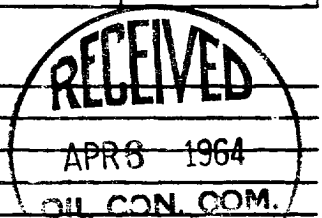
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-S})
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2273 P_c 5,166,529

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.						952,576	4,213,953		.429
2.									
3.									
4.									
5.									

Absolute Potential: 6614 MCFPD; n (1.23)n 1.1679
COMPANY Caulkins Oil Company
ADDRESS P.O. Box 780, Farmington, New Mexico
AGENT and TITLE Frank J. Gray Production Superintendent
WITNESSED _____
COMPANY _____

REMARKS

4-2-64 This well has a bridge plug set at 7170' and is being produced from the Tocito Oil zone as a single completion at this time. It will be recompleted as a Tocito-Dakota dual as soon as a market for the Dakota gas is obtained



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 .