

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Tapacito GALLAN Formation Pictured Cliffs County Rio Arriba
Initial _____ Annual _____ Special X Date of Test 10/17/61
Company Socony Mobil Oil Co., Inc. Lease Jicarilla N Well No. 10
Unit 8 I Sec. 11 Twp. 26N Rge. 3W Purchaser El Paso Natural Gas Co.
Casing 2-7/8" Wt. 6.5# I.D. 2.441 Set at 3702 Perf. 3616 To 3694
Tubing _____ Wt. _____ I.D. _____ Set at _____ Perf. _____ To _____
Gas Pay: From 3616 To 3694 L 3645 xG .680 -GL 2479 Bar.Press. 12 psi
Producing Thru: Casing X Tubing _____ Type Well _____
Date of Completion: _____ Packer _____ Single-Bradenhead-G. G. or G.O. Dual
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								<u>763</u>		
1.	<u>2"</u>	<u>0.750</u>	<u>30</u>		<u>56</u>			<u>30</u>	<u>56</u>	<u>3 hrs.</u>
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	<u>12.3650</u>		<u>42</u>	<u>1.0039</u>	<u>.9393</u>	<u>1.011</u>	<u>495</u>
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
P_c 5.551 (1-e^{-s}) .165
Specific Gravity Separator Gas 680
Specific Gravity Flowing Fluid _____
P_c 775 P_c 600.6

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.	<u>42</u>	<u>1.76</u>	<u>2.75</u>	<u>7.56</u>	<u>1.25</u>	<u>3.01</u>	<u>597.6</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 497 MCFPD; n .85
COMPANY Socony Mobil Oil Company, Inc.
ADDRESS P. O. Box 3371, Durango, Colorado
AGENT and TITLE R. W. Hensley, Prod. Engr.
WITNESSED _____
COMPANY _____

Dist: NMOC 4
EPNG - Galloway 1
" Parrish 1
" Disp. 1
Engn 1
Dgo 1

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 .