

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Tapacito Formation Pictured Cliffs County Rio Arriba
Initial X Annual _____ Special _____ Date of Test 9-2-64
Company Socony Mobil Oil Co., Inc. Lease Jicarilla C Well No. 4
Unit C Sec. 7 Twp. 26N Rge. 3W Purchaser El Paso Natural Gas Company
Casing 4 1/2 Wt. 9.5 I.D. _____ Set at 3835 Perf. 3669 To 3698
Tubing 2-3/8 Wt. 4.7 I.D. _____ Set at 3669 Perf. _____ To _____
Gas Pay: From 3669 To 3698 L 3669 xG .730 Est. -GL 2678 Bar.Press. 12.0
Producing Thru: Casing _____ Tubing _____ Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 8-24-64 Packer No 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	2"	0.750				959		959		
1.			302			302	50	708		3 Hrs.
2.										
3.										
4.										
5.										7 days

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.	12.3650		314	1.0098	.9436	1.046	3.870
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

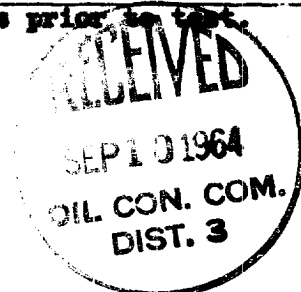
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 971 P_c² 942.8

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.	720					518.4	424.4		
2.									
3.									
4.									
5.									

Absolute Potential: 7.626 MCFPD; n .85
COMPANY Socony Mobil Oil Co., Inc.
ADDRESS P.O. Box 778, Farmington, New Mexico
AGENT and TITLE R.W. Hensley - Prod. Foreman
WITNESSED No
COMPANY _____

cc: MW Kibre (1)
Well File (1)
El Paso Nat.Gas (3)
Mobil, Pnn. (1)
NMCC (4)

REMARKS Well shut-in 7 days prior to test.

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 .