

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Formation Dakota County Rio Arriba
Initial X Annual _____ Special _____ Date of Test 7-16-63
Company Mobil Oil Company Lease Jicarilla Otero Well No. 32-28
Unit 0 Sec. 28 Twp. 24N Rge. 9W Purchaser El Paso Natural Gas Co.
Casing 4 1/2 Wt. 10.5 I.D. _____ Set at 6850 Perf. 6656 To 6700
Tubing 2 3/8 Wt. _____ I.D. _____ Set at 6544 Perf. _____ To _____
Gas Pay: From _____ To _____ L _____ xG .600 est. -GL _____ Bar.Press. 12.0
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 7-5-63 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	<u>2"</u>	<u>0.750</u>				<u>2024</u>		<u>1568</u>		
1.			<u>87</u>			<u>87</u>	<u>74</u>	<u>476</u>		<u>3 hrs</u>
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.	<u>12.3650</u>		<u>99</u>	<u>.9868</u>	<u>1.000</u>	<u>1.007</u>	<u>1.216</u>
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 2036 P_c² 4145.3

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>488</u>					<u>238.1</u>	<u>3.907.2</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 1.271 MCFPD; n .75 1.061^{.75} 01.0453

COMPANY Socony Mobil Oil Company, Inc.

ADDRESS P. O. Box 708 Farmington, N. M.

AGENT and TITLE R. W. Hensley R. W. Hensley - P. H. D.

WITNESSED No

COMPANY _____

REMARKS Well shut-in 8 days prior to test

MOCC 4 EPMB Pm 3 Spgs 1 File 1 Hensley Pm 1



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 .