

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 I Annual _____ Special _____ Date of Test 7-1-57
Company Magnolia Petroleum Company Lease Jicarilla "E" Well No. 3 MV
Unit M Sec. 15 Twp. 27N Rge. 3W Purchaser Pacific Northwest
Casing 5 1/2" Wt. 14 1/2 I.D. 5.012 Set at 6225' Perf. 6655' To 6177'
Tubing 2-3/8" Wt. 4.7 1/2 I.D. 1.995 Set at 5641' Perf. - To -
Gas Pay: From 6655' To 6177' L 5641 xG 0.68 -GL 3836 Bar.Press. 12 psia
Producing Thru: Casing _____ Tubing I Type Well G. G. Dual
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 6-13-57 Packer Yes Reservoir Temp. -

OBSERVED DATA

Tested Through (Pressure) (Choke) (Restrictor) Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Choke) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1767				
1.	2"	0.750"	195	-	68	195	68	-	-	3 Hours
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.	12,3650	-	207	.9924	.9393	1.021	2436
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio - cf/bbl.
Gravity of Liquid Hydrocarbons - deg.
F_c 9.402 (1-e^{-s}) 0.243
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid 0.68
P_c 1779 P_c² 3164.8

No.	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.	207	42.85	22.90	524.4	127.4	170.3	2994.5	412.7	
2.									
3.									
4.									
5.									

Absolute Potential: 2541 MCFPD; n 0.75
COMPANY Magnolia Petroleum Company
ADDRESS Box 2406, Hobbs, New Mexico
AGENT and TITLE Walter H. [Signature] - Gas Engineer
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

- 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} = Supercompressibility 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 .

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