

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco-Mesaverde Formation Mesaverde County Rio Arriba
Initial x Annual _____ Special _____ Date of Test 10/15/57
Company Magnolia Petroleum Company Lease Jicarilla B Well No. 4
Unit M Sec. 19 Twp. 26N Rge. 3W Purchaser Pacific Northwest
Casing 5 1/2" Wt. 11.4 I.D. 5.012 Set at 6217 Perf. 5502 To 6130
Tubing 2 3/8 Wt. 4.7 I.D. 1.995 Set at 5454 Perf. - To -
Gas Pay: From 5502 To 6130 L 5454 xG 0.68 -GL 3709 Bar.Press. 12 psia
Producing Thru: Casing _____ Tubing x Type Well single gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 10-7-57 Packer no Reservoir Temp. _____

OBSERVED DATA

Tested Through (Pressure) (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										
1.	2"	0.75"	175	-	80°	1198 175	80	-	-	3 hrs.
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	-	187	.9813	.9393	-	2131
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
P_c 9.402 (1-e^{-s}) .236

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1210 P_c 1464

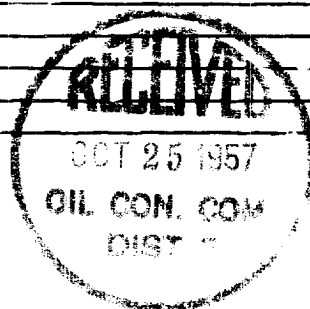
No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w / P _c
1.	187	34.9	20.03	401.2	94.7	129.6	1334.4	360	.297
2.									
3.									
4.									
5.									

Absolute Potential: 2284 MCFPD; n .75COMPANY MAGNOLIA PETROLEUM COMPANYADDRESS BOX 2406, HOBBS, NEW MEXICOAGENT and TITLE D. J. Fuller 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} = 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 .

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