

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Blanco Formation Mesaverde County Rio Arriba
Initial X Annual - Special - Date of Test 8-28-58
Company Magnolia Petroleum Company Lease Featherstone Federal Unit Well No. 1 LT-MW
Unit A Sec. 19 Twp. 26N Rge. 2W Purchaser Pacific Northwest Pipe Line Corp.
Casing 5" Wt. 15# I.D. 4.408 Set at 6125 Perf. 5602 To 6090
Tubing 2 3/8" Wt. 4.7# I.D. 1.995 Set at 6074 Perf. - To -
Gas Pay: From 5602' To 6090' L 6074 xG 0.680(est) GL 4130 Bar.Press. 12 psia
Producing Thru: Casing - Tubing X Type Well G.G. dual
Date of Completion: 8-12-58 Packer yes 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										
1.	2"	3/4"	260	-	61	1278	61	-	-	3
2.						260	61	-	-	
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.	12.3650	-	272	0.9990	0.9393	1.030	3251
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio - cf/bbl.
Gravity of Liquid Hydrocarbons - deg.
P_c 9.402 (1-e^{-s}) 0.259

Specific Gravity Separator Gas -
Specific Gravity Flowing Fluid .680
P_c 1290 P_c 1664.1

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.	272	740	30.6	936.4	242.5	316.5	1347.6	-	-
2.									
3.									
4.									
5.									

Absolute Potential: 3808 MCFPD; n 0.75COMPANY MAGNOLIA PETROLEUM COMPANYADDRESS P. O. Box 2406, Hobbs, New MexicoAGENT and TITLE James A. Logan, Jr. 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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