

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Unnamed Formation Pictured Cliffs County Rio Arriba
Initial X Annual _____ Special _____ Date of Test 12-3-56
Company Magnolia Petroleum Company Lease Jicarilla "H" Well No. 2
Unit A Sec. 2 Twp. 26N Rge. 3W Purchaser Pacific Northwest
Casing 7 5/8" Wt. 24 I.D. 7.025 Set at 4030 Perf. 3797 To 3807
Tubing 2" Wt. 4.7# I.D. 1.995 Set at 3776 Perf. _____ To _____
Gas Pay: From _____ To _____ L _____ xG _____ -GL _____ Bar.Press. 12 psia
Producing Thru: Casing _____ Tubing X Type Well G. G. Dual
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 11-25-56 Packer No Reservoir Temp. _____

OBSERVED DATA

Tested Through (XXXXX) (Choke) (XXXXX) 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						1068		1068		
1.	2"	0.750	159		67	159	67	159		3 Hours
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.	12.3650		171	0.9933	0.9393	1.018	2,008.2
2.							
3.							
4.							
5.							

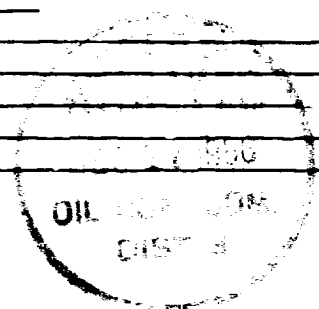
PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid 0.68
P_c 1,080 P_c 1,166.4 x 10³

No.	P _w (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.	171					221.3	944.6		
2.									
3.									
4.									
5.									

Absolute Potential: 2,401.8 MCFPD; n 0.85
COMPANY Magnolia Petroleum Company
ADDRESS Box 727, Kermit, Texas.
AGENT and TITLE Warren W. King, 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 .