

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated P.C. Formation Pictured Cliffs County Rio Arriba
Initial x Annual _____ Special _____ Date of Test 10/24/57
Company MAGNOLIA PETROLEUM COMPANY Lease Jicarilla "H" Well No. 3 P.C.- L.T.
Unit A Sec. 12 Twp. 26N Rge. 3W Purchaser Pacific Northwest
Casing 7 5/8" Wt. 24# I.D. 7.025" Set at 4012 Perf. 3632 To 3694
Tubing 2 3/8" Wt. 4.7 I.D. 1.995 Set at 3579 Perf. - To -
Gas Pay: From 3632 To 3694 L 3579 xG .68(est) -GL 2434 Bar.Press. 12
Producing Thru: Casing _____ Tubing X Type Well G.G. Dual
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 10/5/57 Packer none 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						1148				
1.	2"	0.75"	11	-	60°	11	60°	-	-	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	-	23	1.000	.9393	-	267
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

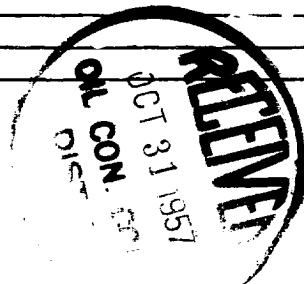
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
 P_c 9.402 $(1-e^{-S})$.162

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
 P_c 1160 P_c^2 1345.6

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	$\frac{P_w}{P_c}$
1.	23	.529	2.51	6.30	1.02	1.549	1344	39.4	.034
2.									
3.									
4.									
5.									

Absolute Potential: 267 MCFPD; n .85
COMPANY MAGNOLIA PETROLEUM COMPANY
ADDRESS Box 2406, Hobbs, New Mexico
AGENT and TITLE George L. Fowler, 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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