

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Tapacito Formation Pictured Cliffs County Rio Arriba
Initial X Annual _____ Special _____ Date of Test 9-26-57
Company Magnolia Petroleum Company Lease Jicarilla "B" Well No. 3 PC.-UT
Unit M Sec. 20 Twp. 26N Rge. 3W Purchaser Pacific Northwest
Casing 7 5/8" Wt. 21# I.D. 7.025 Set at 4,044 Perf. 3,798 To 3,828
Tubing 2 3/8" Wt. 4.7# I.D. 1.995 Set at 3,757 Perf. - To -
Gas Pay: From 3,798 To 3,828 L _____ xG _____ -GL _____ Bar.Press. _____
Producing Thru: Casing _____ Tubing X Type Well GG Dual
Date of Completion: 9-14-57 Packer None 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) (Prover) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.	2"	0.750	112	-	62	112	62	313	-	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	-	124	.9981	.9393	1.013	1.456
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 936 P_c 876.1

No.	P _w 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.	325					105.6	770.5		
2.									
3.									
4.									
5.									

Absolute Potential: 1.623 MCFPD; n .85COMPANY MAGNOLIA PETROLEUM COMPANYADDRESS P. O. BOX 2406, Hobbs, New MexicoAGENT and TITLE W. R. Ruff, 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 .

OIL CONSERVATION COMMISSION		
AZTEC DISTRICT OFFICE		
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DISPOSITION		
Operator	NO.	DATE
Santa Fe	1	
Operation Office		
State Land Office		
U. S. G. S.		
Transporter		
Date	1	✓