

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122  
Revised 12-1-55

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Pictured Cliffs County Rio Arriba  
Initial I Annual - Special - Date of Test 8/12/58  
Company Magnolia Petroleum Company Lease Jicarilla "H" Well No. 7 P.C.-UT  
Unit M Sec. 1 Twp. 26 Rge. 3W Purchaser Pacific Northwest Pipeline  
Casing 7 5/8" Wt. 26.40# I.D. 6.969" Set at 3950' Perf. 3605' To 3675'  
Tubing 2 3/8" Wt. 4.7# I.D. 1.995" Set at 3658' Perf. - To -  
Gas Pay: From 3605' To 3675' L 3658' xG 0.680 est. GL 2487 Bar. Press. 12 psia  
Producing Thru: Casing - Tubing x Type Well G.G. Dual  
Date of Completion: 7/26/58 Packer none Single-Bradenhead-G. G. or G.O. Dual  
Reservoir Temp. -

## OBSERVED DATA

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) ( <del>0.750"</del> ) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.	2"	0.750"	125	-	66	254 125	66	254 282	-	3 hrs.
2.										
3.										
4.										
5.										

## FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.3650	-	137	0.9943	0.9393	1.014	1604
2.							
3.							
4.							
5.							

## PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio - cf/bbl.  
Gravity of Liquid Hydrocarbons - deg.  
P<sub>c</sub> - (1-e<sup>-s</sup>) -

Specific Gravity Separator Gas -  
Specific Gravity Flowing Fluid 0.680  
P<sub>c</sub> 966 P<sub>c</sub><sup>2</sup> 933.2

No.	P <sub>w</sub>	P <sub>t</sub> <sup>2</sup>	F <sub>c</sub> Q	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-s</sup> )	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup>	Cal. P <sub>w</sub>	P <sub>w</sub> / P <sub>c</sub>
1.	<del>294</del> 294	-	-	-	-	86.4	846.5	-	-
2.									
3.									
4.									
5.									

Absolute Potential: 1742 MCFPD; n 0.85

COMPANY MAGNOLIA PETROLEUM COMPANY

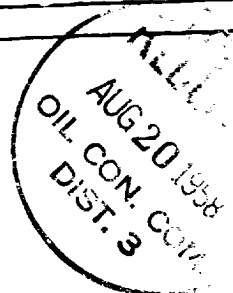
ADDRESS P. O. BOX 2406, HOBBS, NEW MEXICO

AGENT and TITLE William A. Morgan, 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.

$F_{pv}$  = Supercompressibility 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		
No. Copies Received <span style="float: right;">2</span>		
DISTRIBUTION		
	NO. FURNISHED	
Operator		
Santa Fe	1	
Proration Office		
State Land Office		
S. G. S.	1	
Transporter		
File	1	✓