

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool South-Elanco Formation Pictured Cliffs County Rio Arriba
Initial I Annual _____ Special _____ Date of Test 9/29/57
Company Magnolia Petroleum Co. Lease Cullins-Federal Well No. 2
Unit E Sec. 4 Twp. 24N Rge. 3W Purchaser Pacific Northwest
Casing 5 1/2 Wt. 11# I.D. 5.012 Set at 3392 Perf. 3314 To 3339
Tubing 2 3/8 Wt. 4.7# I.D. 1.995 Set at 3,320 Perf. - To -
Gas Pay: From 3,314 To 3,339 L _____ xG _____ -GL _____ Bar.Press. _____
Producing Thru: Casing _____ Tubing x Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 9/16/57 Packer None Reservoir Temp. _____

OBSERVED DATA

Tested Through (Pressure) (Choke) (Restrictor) Type Taps -

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Pressure) (Line) Size	(Choke) (Restrictor) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.	<u>2"</u>	<u>0.750"</u>	<u>122</u>	<u>-</u>	<u>65</u>	<u>934</u> <u>122</u>	<u>65</u>	<u>934</u> <u>197</u>	<u>-</u>	<u>3 hours</u>
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.	<u>12.3650</u>	<u>-</u>	<u>134</u>	<u>.9952</u>	<u>.9393</u>	<u>1.014</u>	<u>1,570</u>
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 946 P_c 894.9

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.	<u>209</u>					<u>43.7</u>	<u>851.2</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 1,638 MCFPD; n 0.85

COMPANY MAGNOLIA PETROLEUM COMPANY
ADDRESS P. O. BOX 2406, HOBBS, NEW MEXICO
AGENT and TITLE Wm. H. King
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 COMMISSION COMMISSION		
AZTEC DISTRICT OFFICE		
Well No.	3	
Operator		
Location		
County		
State		
Latitude		
Longitude		
Transportation		