NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Formation Mesaverde County Rio Arriba

Initial X Annual ____ Special ____ Date of Test 9/23/57

Company Magnolia Petroleum Company Lease Jicarilla "D" Well No. 3 - MV LT

Unit A Sec. 13 Twp. 26N Rge. 3W Purchaser Pacific Northwest Pipeline Co.

Casing 5 1/2 Wt. 14 I.D. 5.012 Set at 6180 Perf. 5566 To 6047

Tubing 2 3/8 Wt. 4.7 I.D. 1.995 Set at 5543 Perf. - To -

Gas Pay: From 5566 To 6047 L 5543 xG .68 =GL 3769 Bar.Press 12 psia

Producing Thru: Casing ____ Tubing X Type Well Dual G.G.
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 8-30-57 Packer ____ Reservoir Temp. ____

OBSERVED DATA

Tested Through ~~(Prover)~~ (Choke) ~~(Meter)~~ Type Taps ____

	Flow Data					Tubing Data		Casing Data		
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	Duration of Flow Hr.
SI						1236	-			
1.	2"	3/4	80	-	62	80	62	-	-	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	-	92	.9981	.9393	-	1,067
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl. Specific Gravity Separator Gas ____
Gravity of Liquid Hydrocarbons ____ deg. Specific Gravity Flowing Fluid ____
P_c 9.402 $(1-e^{-s})$ .240 P_c 1,248 P_c^2 1557.5

No.	P_w / P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2$ $(1-e^{-s})$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	92	8.5	10.03	100.6	24.1	32.6	1524.9	180.6	.145
2.									
3.									
4.									
5.									

Absolute Potential: 1084 MCFPD; n 0.75

COMPANY Magnolia Petroleum Company
ADDRESS Box 2406, Hobbs, New Mexico
AGENT and TITLE Warren W. Rintz, Gas Engineer
WITNESSED -
COMPANY -

RECEIVED
SEP 30 1957
OIL CON. COM.
DIST. 3

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.