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 12/8/57

Company Magnolia Petroleum Company Lease Jicarilla "C" Well No. 3 P.C.

Unit H Sec. 8 Twp. 26N Rge. 3W Purchaser Pacific Northwest

Casing 7 5/8" Wt. 24# I.D. 7.012 Set at 3920 Perf. 3,618 To 3,680

Tubing 2 3/8" Wt. 4.7# I.D. 1.995 Set at 3639 Perf. - To -

Gas Pay: From 3,618 To 3,680 L 3,639 xG - -GL - Bar.Press. -

Producing Thru: Casing ____ Tubing X Type Well G. G. Dual

Date of Completion: 10/31/57 Packer None Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp. -

OBSERVED DATA

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

No.	Flow Data ~~(Prover)~~ (Line) Size	Flow Data (Choke) ~~(Orifice)~~ Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						961	-	961		
1.	2"	0.750"	39	-	58	39	58	115	-	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	-	51	1.0019	.9393	-	593
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 961 P_c^2 923.5

No.	P_w ~~P_t~~ (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	127					161	907.4		
2.									
3.									
4.									
5.									

Absolute Potential: 602 MCFPD; n 0.85

COMPANY MAGNOLIA PETROLEUM COMPANY
ADDRESS P. O. BOX 2406, HOBBS, NEW MEXICO
AGENT and TITLE [signature]
WITNESSED -
COMPANY -

REMARKS

RECEIVED
DEC 23 1957
OIL CON. COM.
DIST. 3

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
No. Copies

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco-Mesaverde Formation Mesaverde County Rio Arriba

Initial X Annual - Special - Date of Test 12/8/57

Company Magnolia Petroleum Company Lease Jicarilla "C" Well No. 3 M.V. - LT

Unit H Sec. 8 Twp. 26N Rge. 3W Purchaser Pacific Northwest

Casing 5 1/2" Wt. 14# I.D. 5. Set at 5876 Perf. 5,341' To 5,866'

Tubing 2/3/8" Wt. 4.7# I.D. 1.995 Set at 5319 Perf. - To -

Gas Pay: From 5,341 To 5,866 L 5,319 xG ~~Gas~~ -GL ~~Gas~~ Bar.Press. ~~Gas~~

Producing Thru: Casing ~~Gas~~ Tubing x Type Well G. G. Dual
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 10/31/57 Packer 5,309' Reservoir Temp. ~~Gas~~

OBSERVED DATA

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

No.	Flow Data: ~~(Prover)~~ (Line) Size	Flow Data: (Choke) ~~(Orifice)~~ Size	Flow Data: Press. psig	Flow Data: Diff. h_w	Flow Data: Temp. °F.	Tubing Data: Press. psig	Tubing Data: Temp. °F.	Casing Data: Press. psig	Casing Data: Temp. °F.	Duration of Flow Hr.
SI						912	-			
1.	2"	0.750	0	-	-	0				open 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.	Flowed two hours and died						T.S.T.M.
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas ____
Specific Gravity Flowing Fluid ____
P_c 924 P_c^2 ____

No.	P_w / P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.									
2.									
3.									
4.									
5.									

Absolute Potential: - MCFPD; n -
COMPANY Magnolia Petroleum Company
ADDRESS P. O. Box 2406, Hobbs, New Mexico
AGENT and TITLE Wayne W. Kurtz, Gas Engineer
WITNESSED -
COMPANY -

REMARKS

RECEIVED DEC 23 1957 OIL CON. COM.

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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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AZTEC DISTRICT OFFICE
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