3 N.M.O.C.C.
2 Tex. Nat.
1 Monerief
1 File

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Formation Dakota County San Juan

Initial X Annual ____ Special ____ Date of Test 12-23-60

Company Texas National - Monerief Lease Federal Well No. 1-22-29-12

Unit A Sec. 22 Twp. 29N Rge. 12W Purchaser ____

Casing 4½ Wt. 9.5&11.6 I.D. ____ Set at 6334 Perf. 6140 To 6234

Tubing 2 3/8 Wt. 4.7 I.D. ____ Set at ____ Perf. ____ To ____

Gas Pay: From 6140 To 6234 L ____ xG .720 -GL ____ Bar.Press. ____

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

Date of Completion: ____ Packer ____ 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						2118		2122		
1.										
2.										
3.	2"	3/4	512		81			1198		3 hrs.
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.							
2.							
3.	12.3650		524	.9804	.9129	1.062	6158
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl. Specific Gravity Separator Gas ____

Gravity of Liquid Hydrocarbons ____ deg. Specific Gravity Flowing Fluid ____

F_c ____ $(1-e^{-s})$ ____ P_c 2134 P_c^2 4554

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.									
2.									
3.	1210					1464	3090		1.4730
4.									
5.									

Absolute Potential: 8237 MCFPD; n .75 1.3376

COMPANY Texas National - Monerief

ADDRESS 902 S. Coast Bldg., Houston Texas

AGENT and TITLE T. A. Dugan - Consulting Engineer

WITNESSED ____

COMPANY ____

REMARKS

RECEIVED
DEC 28 1960

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.