NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool __Basin Dakota__ Formation __Dakota__ County __San Juan__

Initial __X__ Annual_____ Special_____ Date of Test __10-15-64__

Company __PAN AMERICAN PETROLEUM CORP.__ Lease __Gallegos Canyon Unit-Dak.__ Well No. __176__

Unit __6__ Sec. __23__ Twp. __28N__ Rge. __13W__ Purchaser_____

Casing __4-1/2__ Wt. __10.5__ I.D. __4.052__ Set at __6402__ Perf. __6313-6330__ __6266-61__ To_____

Tubing __2-3/8__ Wt. __4.7__ I.D. __1.995__ Set at __6272__ Perf. __6241__ To __6235__

Gas Pay: From __6266__ To __6330__ L __6288__ xG __.700__ —GL __4401__ Bar.Press. __12__

Producing Thru: Casing_____ Tubing __X__ Type Well __Single__

Date of Completion: __10-6-64__ Packer __None__ Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp._____

OBSERVED DATA

Tested Through __Prover__ (Choke) __Meter__   Type Taps __Flange__

No.	(Line) Size	(Choke) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI	3 Days					2014		2010		
1.	2 Inch	.730	461			461	80° est.	979	80° est.	3 hr.
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.	12.3450		473	1.000	.9258	1.040	1740
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 __2076__ P_c^2 __4,309,776__

No.	P_w P_t (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	$\frac{P_w}{P_c}$
1.						982,001	3327,075		
2.									
3.									
4.									
5.									

Absolute Potential: __4968__ MCFPD; n __.73__
COMPANY __PAN AMERICAN PETROLEUM CORPORATION__
ADDRESS __Box 480, Farmington, New Mexico__
AGENT and TITLE __V. L. Ribers, District Engineer__
WITNESSED __by__ Orginal Signed By
COMPANY __G. W. EATON, JR.__

REMARKS
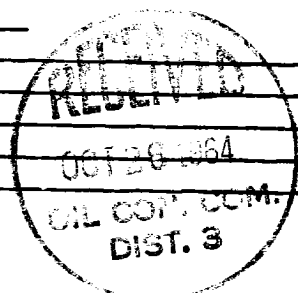
INSTRUCTIONS

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.