NEW MEXICO OIL CONSERVATION COMMISSION

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool _____ Formation _____ County _____

Initial __X__ Annual _____ Special _____ Date of Test _April 14, 1964_

Company _Pan American Petroleum Corp._ Lease _Gallegos Canyon Unit-Dak._ Well No. __154__

Unit __a__ Sec. __22__ Twp. __29-N__ Rge. __13-W__ Purchaser _____

Casing _4-1/2"_ Wt. _10.50_ I.D. _4.052_ Set at _6440'_ Perf. _6274-88'_ To _6341-54'_

Tubing _2-3/8"_ Wt. _4.70_ I.D. _1.995_ Set at _6282'_ Perf. _Open_ To _Ended_

Gas Pay: From _6274'_ To _6354'_ L _6314_ xG _.700_ _GL _4420_ Bar.Press. _12_

Producing Thru: Casing _____ Tubing __X__ Type Well _Single_
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: _April 9, 1964_ Packer _None_ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Bradenhead) (Choke) (Natural)   Type Taps _Flange_

No.	(Burner) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	Duration of Flow Hr.
						Tubing Data		Casing Data		
SI	7 days					2015		2016		
1.	2 days	.750	608			608	60° est.	1482	60° est.	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.	11.3450		700	1.050	.8834	1.044	5763
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 _____
F_c _____ $(1-e^{-s})$ _____ P_c _2020_ P_c^2 _4,112,784_

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.						3,222,038	1,000,740		
2.									
3.									
4.									
5.									

Absolute Potential: _13,792_ MCFPD; n _____.75_____

COMPANY _Pan American Petroleum Corporation_
ADDRESS _P. O. Box 480, Farmington, New Mexico_
AGENT and TITLE _Fred L. Moore, District Engineer_
WITNESSED _By: J. C. Field_
COMPANY _F. C. Nall_

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.