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 10-22-64

Company PAN AMERICAN PETROLEUM CORP. Lease L. C. Kelly Well No. 5

Unit I Sec. 3 Twp. 30N Rge. 12W Purchaser ____

Casing 5-1/2 Wt. 14# 15.5# I.D. 5.012 4.950 Set at 6616 Perf. 6572 To 6606

Tubing 1-1/2 Wt. 2.7 I.D. 1.610 Set at 6563 Perf. 6530 To 6536

Gas Pay: From 6572 To 6606 L 6606 xG .700 -GL 4679 Bar.Press. 12

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

Date of Completion: 12-13-64 Packer 6532 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	7 days					1856				
1.	2 inch	.750	142			142	68°			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.	12.3630		154	1.000	.9258	1.017	1793
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl.
Gravity of Liquid Hydrocarbons ____ deg.
F_c 16.48 $(1-e^{-s})$ .880

Specific Gravity Separator Gas ____
Specific Gravity Flowing Fluid ____
P_c 1908 P_c^2 3,640,464

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.	154	23,716	29.513	871.006	990,000	274.363	3,365,099	336	27.3
2.									
3.									
4.									
5.									

Absolute Potential: 1902 MCFPD; n .75

COMPANY PAN AMERICAN PETROLEUM CORPORATION
ADDRESS Box 480, Farmington, New Mexico
AGENT and TITLE J. L. Ribera, District Engineer
WITNESSED By ORIGINAL SIGNED BY F. W. Foell
COMPANY

RECEIVED
JAN 5 1965
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.