

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 9-2-66
 Company PAN AMERICAN PETROLEUM CORP. Lease Gallegos Canyon Unit Well No. 171
 Unit D Sec. 25 Twp. 20N Rge. 13W Purchaser _____
 Casing 4-1/2 Wt. 10.5 I.D. 4.032 Set at 6003 Perf. 5760-68 To 5032-62
5760-00
 Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 3777 Perf. 5741 To 5747
 Gas Pay: From 5760 To 5032 L 5034 xG .700 -GL 4077 Bar.Press. 12
 Producing Thru: Casing _____ Tubing X Type Well Single
 Single-Bradenhead-G. G. or G.O. Dual
 Date of Completion: 8-25-64 Packer None Reservoir Temp. _____

OBSERVED DATA

Tested Through (Pressure) (Choke) (Meters) Type Taps Flange

No.	Flow Data				Tubing Data		Casing Data		Duration of Flow Hr.	
	(Line) Size	(Choke) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig		Temp. °F.
1.	<u>2 Inch</u>	<u>.750</u>	<u>620</u>			<u>2076</u>	<u>60° sat.</u>	<u>2076</u>	<u>60° sat.</u>	<u>3 Hr.</u>
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.	<u>12.3630</u>		<u>641</u>	<u>1.000</u>	<u>.9230</u>	<u>1.002</u>	<u>7940</u>
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

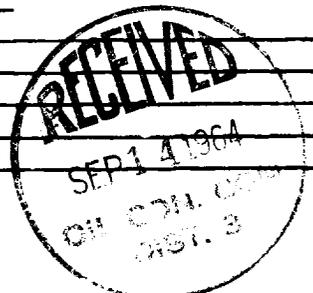
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
 Gravity of Liquid Hydrocarbons _____ deg.
 F_c _____ (1-e⁻⁸)
 Specific Gravity Separator Gas _____
 Specific Gravity Flowing Fluid _____
 P_c 2000 P_c² 4,000,000

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ⁻⁸)	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.						<u>1,077,600</u>	<u>2,661,025</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 11,405 MCFPD; n .75

COMPANY PAN AMERICAN PETROLEUM CORPORATION
 ADDRESS Box 400, Farmington, New Mexico
 AGENT and TITLE F. L. Hubers, District Engineer
 WITNESSED By: _____
 COMPANY ORIGINAL SIGNED by
F. W. Foell

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} = Supercompressibility 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 .