

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Basin Dakota Formation Dakota County San Arriba
Initial X Annual _____ Special _____ Date of Test 9-27-61
Company Pan American Petroleum Corp. Lease Jicarilla Contract 148 Well No. 13
Unit C Sec. 15 Twp. 25N Rge. 5E Purchaser El Paso Natural Gas Company
Casing 4-1/2" Wt. 9.5 I.D. 4.090 Set at 7563 Perf. 7426-7429 To 7460-7463
Tubing 2-3/8" Wt. 4.7 I.D. 1.995 Set at 7410 Perf. open ended To _____
Gas Pay: From 7422 To 7470 L 7410 xG 0.700 est -GL 5119 Bar.Press. 12
Producing Thru: Casing _____ Tubing X Type Well Single-Gas
Date of Completion: 8-8-61 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. 139°F

OBSERVED DATA

Tested Through (Prover) (Choke) (None)

Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	3/4" - 1"	30 days				1985		1986		
1.	2 inch	3/4 inch	43		60 est	53	60 est	393	60 est	3 hrs
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.							
2.	12.363		57	1.000	0.9258	1.000	653
3.							
4.							
5.							

PRESSURE CALCULATIONS

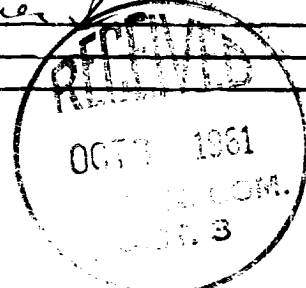
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
 P_c _____ $(1-e^{-S})$ _____

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
 P_c 1998 P_c^2 3,992,004

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.						156,449	3,837,555		
2.									
3.									
4.									
5.									

Absolute Potential: 673 MCFPD; n 0.75
COMPANY Pan American Petroleum Corporation
ADDRESS Box 480, Farmington, New Mexico
AGENT and TITLE R. K. Bauer, Jr. Senior Petroleum Engineer
WITNESSED _____
COMPANY _____

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 .