

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Alamo-Pictured Cliffs Formation Pictured Cliffs County San Juan
Initial I Annual _____ Special _____ Date of Test 8-19-57
Company PAN AMERICAN PETROLEUM CORP. Lease W. D. Heath "A" Well No. 4
Unit 9 Sec. 9 Twp. 27N Rge. 9W Purchaser Shut-In
Casing 4 1/2 Wt. 9.5 lb I.D. 4.12 1/2 Set at 2331 Perf. 2332 To 2334
Tubing 1 1/4 Wt. 2.9 I.D. 1.375 Set at 2330 Perf. 2334 To 2330
Gas Pay: From 2330 To 2334 L 2330 xG .65 est. -GL 1513 Bar.Press. 12
Producing Thru: Casing I Tubing _____ Type Well Single - Gas
Date of Completion: 8-4-57 Packer _____ Reservoir Temp. 80° F
Single-Bradenhead-G. G. or G.O. Dual

OBSERVED DATA

Tested Through (Shut-In) (Choke) (Shut-In) 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.	
1.	<u>Shut-In</u>	<u>12 days</u>				<u>1000</u>		<u>1000</u>		
2.		<u>1/4</u>	<u>280</u>			<u>210</u>	<u>60</u>	<u>212</u>	<u>60</u>	<u>1 Hr.</u>
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>12.14</u>		<u>282</u>	<u>1.0000</u>	<u>.9658</u>	<u>1.025</u>	<u>2470</u>
2.							
3.							
4.							
5.							

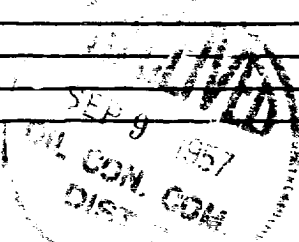
PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Specific Gravity Separator Gas _____
Gravity of Liquid Hydrocarbons _____ deg.
Specific Gravity Flowing Fluid .65 est.
F_c _____ (1-e^{-s}) P_c 1012 P_c² 1,024,144

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	P _w /P _c
1.						<u>10,224</u>	<u>974,140</u>		<u>.28</u>
2.									
3.									
4.									
5.									

Absolute Potential: 2,817 MCFPD; n .45
COMPANY PAN AMERICAN PETROLEUM CORPORATION
ADDRESS Box 487, Farmington, New Mexico
AGENT and TITLE R. H. Heath, Jr., Field Engineer RH Heath, Jr.
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 .

CONSERVATION COMMISSION		
AZTEC DISTRICT OFFICE		
No. Copies	3	
DATE		
Operator		
Santa Fe		
Production Office		
Checked by		
Time		
File		✓